BUILDING BETTER HEALTH

MONTANA STATE BOARD OF HEALTH

HELENA, MONTANA

33rd BIENNIAL REPORT • JULY 1, 1964 - JUNE 30, 1966

Building Better Health

MONTANA STATE BOARD OF HEALTH

HELENA, MONTANA

33RD BIENNIAL REPORT

JULY 1, 1964 - JUNE 30, 1966

Table of Contents

Building Better Health

STAFF PHOTOGRAPHERS: Robert L. Solomon and (Mrs.) Maxine S. Homer, health education consultants. Several photographs were provided by Richard E. Isern, Lewistown, Sanitarian. Photographs other than those taken by these persons are indicated under each picture.

WHAT IS PUBLIC HEALTH?

This is not an easy question to answer. It means different things to different people. This report can be considered as a sort of definition of public health. It describes the activities and programs of the Montana State Board of Health. These activities are most certainly varied, but all have two attributes in common. They strive to promote better health for the citizens of the State, and they are in existence because the people, through their elected representatives, have decided that the programs are necessary.

Public health, in this sense, is constantly changing. New programs are added at the same time others are discontinued. Health problems do change with time as well as the demands of the people for better health.

1964-66 was certainly a most dynamic period for public health in Montana. Increased attention was given to our environment. We are concerned about the air we breathe while struggling to find a satisfactory legislative approach to conserve our air resources.

We are learning how to live with the many chemical agents surrounding us, trying to maintain the benefits without sacrifice to our health.

Our water courses are supervised so that they can be utilized for many purposes and so that each use will not impair the water for others.

We have been accumulating knowledge. It is necessary to know the enemy in order to defeat him. Mental retardation is a good example. Who are the mentally retarded? Where do they live? What community services would be effective in aiding the retarded and their families? The problems have been defined by those who are most acquainted with them—the people in the community. The State Board of Health has been involved with the organization of the people so that their ideas and knowledge could be channeled into meaningful recommendations.

We have attempted to fill gaps in personal health protection by making immunizations more readily available.

We have also imparted knowledge—facts about venereal disease to teen-agers, implications of parenthood to future parents, and proper diets for the elderly in nursing homes.

We constantly work toward the goal of effective public health service for all the citizens of Montana. This is made difficult because of the distribution of population. Sparsely populated areas have been denied many local health services, because the political sub-divisions of the State have not been able to provide them.

Much staff time and effort have been expended to make new federal health programs possible in this State. The most notable example is "medicare" which requires us to certify to the federal government the quality of medical care in hospitals, nursing homes and home health programs.

It has been a busy and productive biennium. The future promises to be even more so.

We plan to do more in heart, cancer and stroke, the leading causes of death, and to place more emphasis on the prevention of defects that are showing in selective service rejectees.

John S. Anderson

John S. Anderson, M.D., M.P.H.

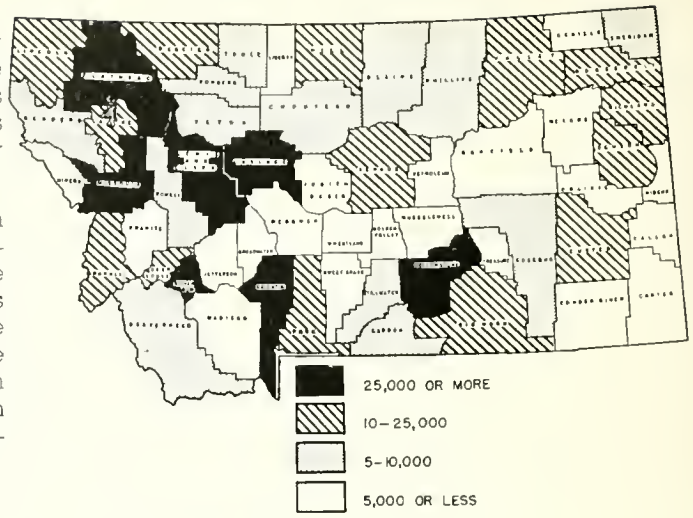
Executive Officer

. . . THE PEOPLE

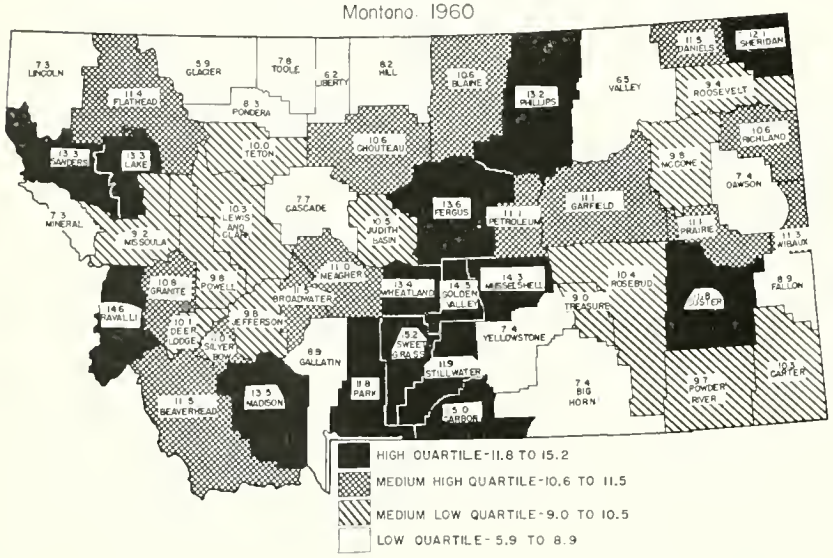
Public health programs aimed to "Build Better Health" affect most of the State's population in some way. The 1965 estimated population of the State is 706,000 which is up about 31,000 from the 1960 census enumeration. The population distribution by county is shown on the accompanying map.

The distribution of this population on the fourth largest State is of considerable significance in providing public health services. It will be noted there are only seven counties with population estimates of 25,000 or more, yet these seven counties have one-half the State's population. The other half of the population is located in the other 49 counties which cover more than 85% of the State's land area, with the most sparsely populated county having approximately one-half person per square mile.

POPULATION ESTIMATES
Montana Counties, July 1, 1965

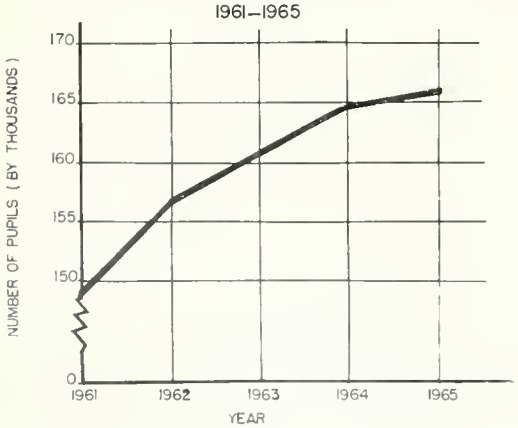


PERCENT OF POPULATION OF PERSONS AGE 65 AND OVER
Montana 1960

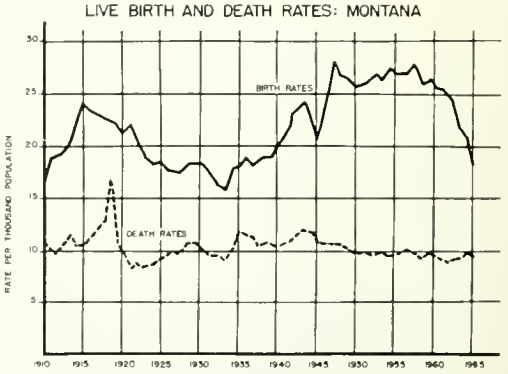


Other population items of public health interest show the percent of population of persons in the 65 and over age group by county; the increase in the numbers of children enrolled in schools reported by the State Department of Public Instruction and certain vital information.

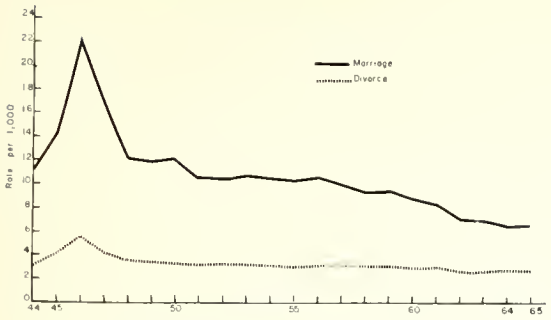
NUMBER OF PUPILS ENROLLED IN MONTANA SCHOOLS, KINDERGARTEN THROUGH HIGH SCHOOL ON OCTOBER 1ST, 1961–1965



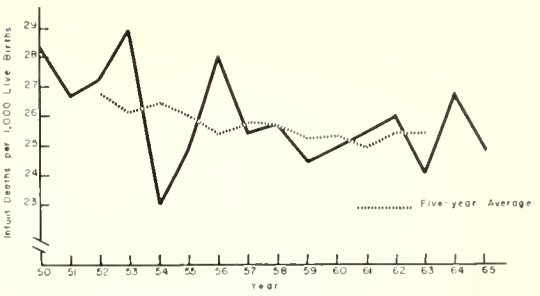
LIVE BIRTH AND DEATH RATES: MONTANA



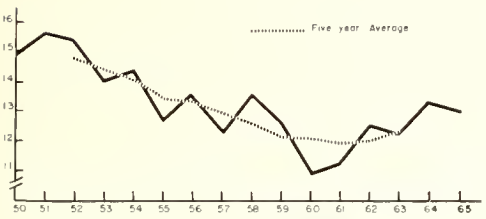
MARRIAGE AND DIVORCE RATES
Montana, 1944-65



INFANT DEATH RATES AND FIVE-YEAR MOVING AVERAGE:
Montana, 1950-1965

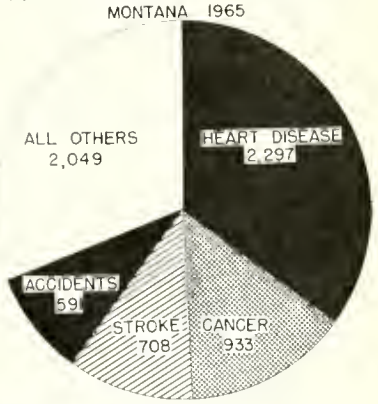


FETAL DEATH* RATIOS AND FIVE-YEAR MOVING AVERAGE:
Montana, 1950-1965



*Stillbirths

FOUR LEADING CAUSES OF DEATH
MONTANA 1965



. . . THEIR SURROUNDINGS

The surroundings in which Montanans live are constantly changing—some of the changes improve the public health while many create new health hazards. The Board's programs which are directed toward the environment are geared to the prevention of health problems, or should problems occur, the Board aims to take action before they become serious.

Studies continue in pinpointing **air pollution** hazards as they affect the health of the citizens. Since "air" is fundamentally for the support of life, its quality must be maintained so that it will not degrade, either acutely or chronically, man's health. After this basic quality has been assured, the use of air as a means of waste disposal may be then weighed against economics, aesthetics and nuisances to determine the optimum balance.

Air Pollution Continues from Portable Asphalt Mixing Plants in Spite of the Fact That a Simple Dust Control Device Has Been on the Market for 40 Years.

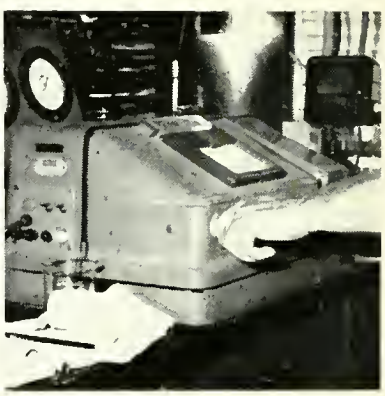
Air Collection Device Collects Samples of Air for the Detection of Pollution. Sampling Stations Have Been Set Up in Eight Communities. Their Purpose Is to Determine Lead, Arsenic, Fluorides, Total Particulate Weight, Benzene Soluble Materials and Sulphates. Equipment Has Been Loaned to the Missoula City-County Health Department for Its Program in Which Four High Volume Air Samplers Are Operating.

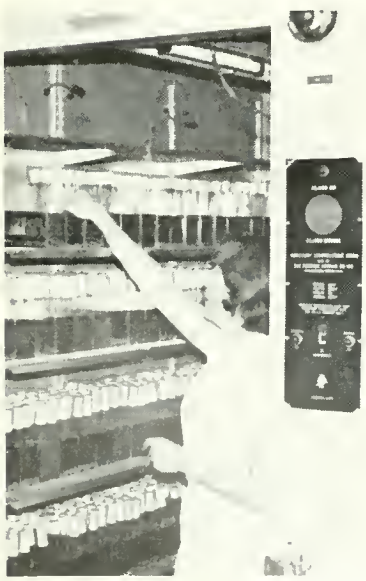
Wind speeds and temperatures are being recorded at Deer Lodge and temperatures at Anaconda, Deer Lodge, Garrison, and other areas in the Deer Lodge Valley with high elevations. The objectives of the temperature measurements, which are made voluntarily at private homes or mines, is to determine, if possible, the occurrence and duration of air inversions that occur in the Deer Lodge Valley, which will be coupled with the wind speed at Deer Lodge. Air inversions hold wastes from dispersion into the atmosphere, thus holding the pollution stationary.

The only law on the books relating to air pollution was passed by the 1965 legislature. It defines air pollution and establishes the SBH as an air pollution research agency.

To work toward the enactment of air pollution control legislation, the SBH, at the request of Governor Tim Babcock, appointed a legislative study committee. This committee which has broad representation has a suggested proposal ready for legislative consideration. It would divide air pollution control responsibility between a State Air Conservation Council and the SBH. With the enactment of this proposal or similar legislation it is expected that steps can be taken which will satisfactorily protect the health of Montana citizens from the hazards of air pollution.

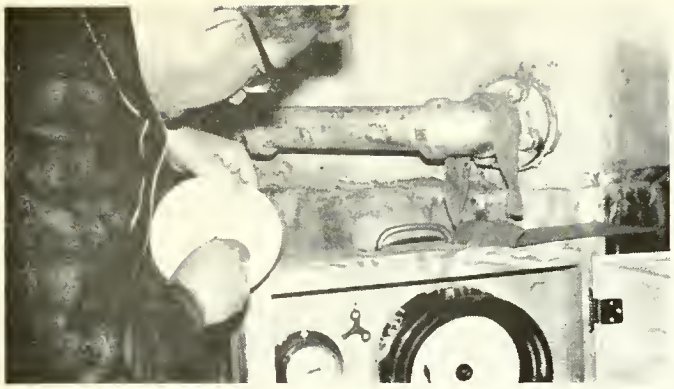
About 50% of the Samples Analyzed for Contaminants by the Chemical Laboratory were from Air and Water. The Total Number of Samples was 4,129 with 13,129 Determinations Made. Many of the Contaminants Which are Analyzed are in Micro Quantities Requiring Sophisticated Chemical Methods and Equipment, such as the Spectrophotometer shown on the right.





The SBH Has the Responsibility to Assure that Standards for the Safe Quality of Water are Met. Bacterial Laboratory Tests Were Run on More Than 20,000 Water Samples and 938 Chemical Examinations Were Made.* There were 562 Inspections of Water Supplies Carried Out.

* Unless otherwise stated, figures given in this entire report are for the biennium July 1, 1964 - June 30, 1966.



It is Important to Check Water Pressure in a Municipal Supply Since in Some Areas the Water Pressure May Drop During Periods of Heavy Water Usage. If the Water Pressure Drops It May Be Possible for the Dirty Water or Sewage to be Drawn Back into the Water Line if There are Unsafe Plumbing Fixtures.

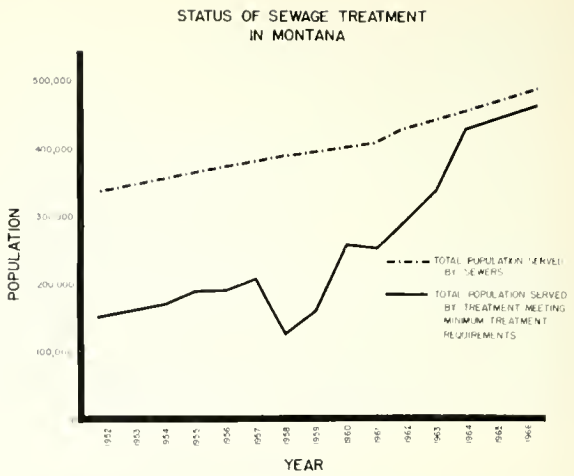
The Rebuilding of a Deteriorated Municipal Water Supply Reservoir is Underway. Concrete is Applied Under Pressure and a Roof Will be Placed Over the Reservoir.

Pumps and Controls in a Pumphouse for a Municipal Water System Serving Six Montana Communities are Shown. These Communities are: Kremlin, Gildford, Hingham, Rudyard, Inverness and Joplin. The Water Comes from the Fresno Reservoir by 36 Miles of Pipeline.

The primary problem with water supplies in this State is the many small supplies where the operator does not recognize his responsibility in maintaining the water in good condition at all times. Efforts are made to improve this situation.

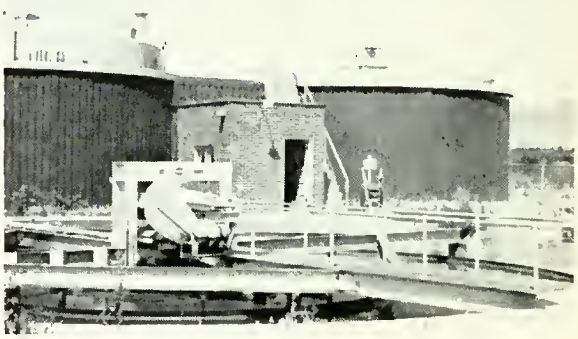
Of the 154 plans for water supplies and sewage disposal plants in subdivision property, 124 were approved. Approval must be given by the SBH before any subdivider can give a clear title to land purchaser. This law passed in 1961 has contributed a great deal to improve conditions in new subdivisions, but the law was not retroactive so problems relating to water and sewage problems still exist in some of the older subdivisions.

All of Montana's 155 Sewered Municipalities Serving Approximately 460,000 Persons Either Have, or Will Have Soon, Treatment of Their Sewage Wastes. There are 132 Treatment Facilities Serving 440,000 Persons that Meet Minimum Requirements Serving 96% of the Population. Minimum Treatment Requirements are Set by the Montana Water Pollution Council.



A Device is Pictured on the left Which Aerates Sewage Prior to Discharge Into the Lagoon (pictured on the right). There are 105 Sewage Lagoons Treating Sewage in Montana.

Pictured is a Sewage Disposal Plant Which Has Been Rebuilt to Provide Improved Treatment in One of the State's Major Municipalities. There are 23 Communities With Sewage Treatment Facilities That Do Not Meet Minimum Requirements. Work is Underway to Improve This Situation.



Since 1952 Funds in the Amount of $7,800,000 have been Spent on Sewage Treatment Facilities, With Another $4,600,000 for Interceptor Sewer Lines, Outfall Sewer Lines and Pumping Stations. A Greater Amount Has Been Spent on Industrial Waste Treatment.

New sewer systems with treatment plants have been constructed in three communities; new sewage plants in six communities; additions to existing treatment plants in four communities and construction has been started in three communities and one industry. There have been 16 industrial treatment facilities either newly constructed or additions made to their existing plants.

The staff made 577 inspections of public sewage disposal systems, 596 bacterial and 639 chemical tests on water samples for the stream pollution program.

Improved operation and maintenance of many of the treatment plants is needed, as is some training of many of the operators. It would be highly desirable to require licensure or certification of all operators in order to maintain an adequate level of treatment of wastes.

In Montana All Streams Have Been Classified and Standards Adopted. This Was Done by the State Water Pollution Control Council, in 1958, 1959, 1961 and early 1966. The Council Adopts Policy Which is Carried Out by the SBH Staff. The Council's Goal is to Maintain the High Quality of Montana Streams.

The law requiring **licensing of persons who clean septic tanks,** cesspools and privies needs to be strengthened or abandoned as many persons are evading this law or are not obtaining a permit from the local health officer which is also required in the present law. There were 137 licenses issued.

Industrial hygiene studies were made in 27 plants covering an industrial population of 2,625 in the 1965 calendar year. One was a detailed study in one of the largest plants in the State and the improvements made following the recommendations suggested in the study are most encouraging.

Another study which appears to be of considerable value was begun on the dust conditions in grain mills. With the use of a "respirometer" device, the vital capacity of the workers employed in grain mills will be attempted.

The Board's activities in **radiological health** have been very limited in the last fiscal year. Prior to this time the survey of all X-ray equipment in the physician's office in the State was completed. The objective of this was to identify, measure and eliminate unnecessary radiation exposure situations.

The maintenance and operation of the early warning fall-out surveillance stations, established in Havre, Missoula, Billings, Sidney, Kalispell, Dillon and Lewistown, continues. These seven stations are operating in the major milk sheds of the State.

In the general sanitation program, the demands of the **sanitation of food** are increasing with the tremendous growth of the restaurant business. In 29 counties where sanitarians are employed, the sanitation control via the State licensure program is handled by them. The remainder of the counties may occasionally be inspected by the local health officer or by a member of the State staff on request.

There Are Hundreds of Samples of Hamburger Analyzed for Fat with a Field Tester Each Year to Help Insure Quality Food Products for Consumers.

There are 1600 Eating Establishments in Montana Which Are Licensed by the SBH. A Local Sanitarian Is Shown Making an Inspection in One of Them.

Efforts in bringing about improvement in restaurant sanitation have been aided with the adoption of an up-to-date licensing law by the 1965 legislature and regulations under this law adopted by the Board. The Board's staff has recently established a program for the evaluation of restaurant sanitation in order to promote uniformity and thoroughness in inspections.

Food and Drug Control work involves the prevention of illegal sale of drugs, misbranding and adulteration of food and drugs, the sanitation of food and drug manufacturing establishments, the investigation and control of food poisoning. The Board's Laboratory staff makes examinations of food samples in an effort to detect outbreaks of food poisoning and by determining the source, prevent its spread. Laboratory participation in an investigation of one salmonellosis outbreak successfully isolated nine strains of S. typhimurium.

One of the problems in this area during the last biennium was that associated with the sale of plastic items filled with contaminated water, used for cooling drinks and as infant teething rings, which were seized and destroyed. Laboratory studies were carried out on 47 items and all were found to contain large numbers of bacterial organisms, some of them potentially hazardous.

In Food and Drug Control work a complete program is needed which would meet the problems as the population and industries increase. This would include up-dating the present Montana law so that it would be uniform with the majority of other States. Since the local sanitarians serve as agents in the control program, their employment is needed in those areas of the State where there are now no sanitarian services.

Surveys of housing, including refuse, garbage and vector control have been made in six cities. Improvement programs based upon the background gleaned from the surveys are being developed. Generally, the problems that arise are in areas where there are poor environmental conditions.

Motels and hotels, trailer courts and campgrounds, Job Corps camps and schools are other kinds of housing where sanitation control is important. Up-to-date laws are needed to properly regulate motels and hotels and another piece of legislation is needed just for trailer courts.

A Sanitarian Checks Sewer Drain Lines at a Trailer Court.

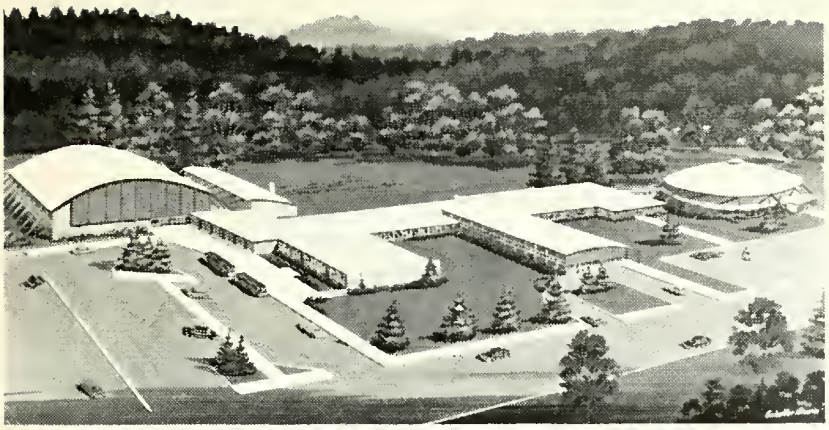


Photo courtesy Taylor, Thon & Kirkpatrick, Architects

All Schools Must Submit to the SBH for Review and Approval, Plans for New Construction or Remodeling. During the Biennium 157 Such Plans Were Submitted, One of Which is the New High School at Libby. Shown Is the Architect's Sketch.

Not Uncommon is Improper Garbage and Refuse Disposal Areas Which Offer an Invitation to the Spread of Rat Infestation and the Breeding of Flies. The Need for Rodent Control Programs is Evidenced by the Incidence of Rabies, Sylvatic Plague, and Many Other Diseases Spread by the Norway Rat.

Local Communities Are Encouraged to Develop Active Vector Control Programs. The Need for These Programs Is Evidenced by the Variety of Rodents Caught in a Rodent Eradication Program.

Garbage and Refuse Create Water Pollution When Dumped Where It Has Ready Access to a Stream.

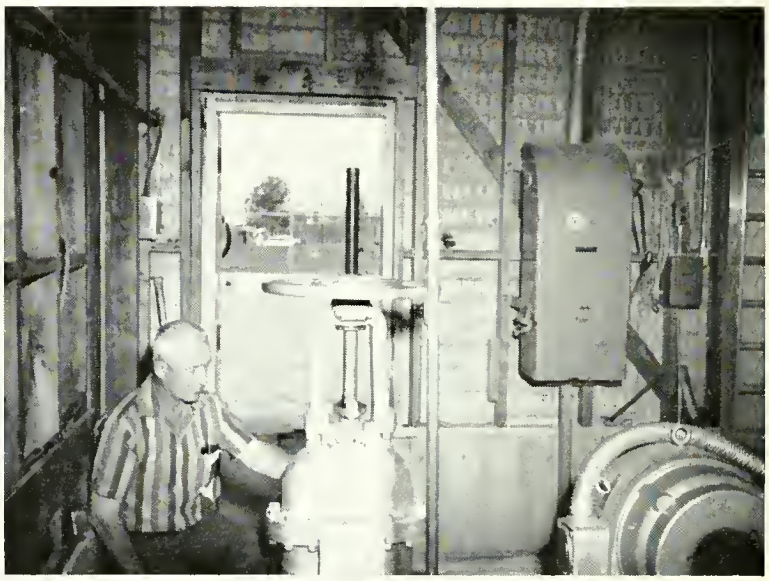
The health hazards, created by the improper disposal of garbage and refuse, have brought about the legislation passed by the 1965 legislature which authorizes the SBH to review and approve plans for garbage disposal areas and authorizes local health departments to issue permits for such garbage disposal. Many communities have already complied with the law and have established satisfactory garbage disposal, with the usually recommended landfill method. Others have acquired the land and are developing plans.

Pesticides are useful in controlling insects that damage food production on Montana's farms, yet the concentration of pesticides must not be so great as to cause illness to those who consume the food. Striking a proper balance is becoming increasingly hard.

Montana has adopted the Uniform Labeling Act for insecticides, fungicides and herbicides which makes it possible for the SBH to register pesticide labels of products sold in the State and to also accept the registration of the U. S. Department of Agriculture.

To aid the SBH on the problems involved in the use of pesticides, an advisory committee has been formed. It has representatives from ten Montana agencies concerned with the problems involved, and it is hoped that a more comprehensive and meaningful program involving pesticides can be developed in Montana.

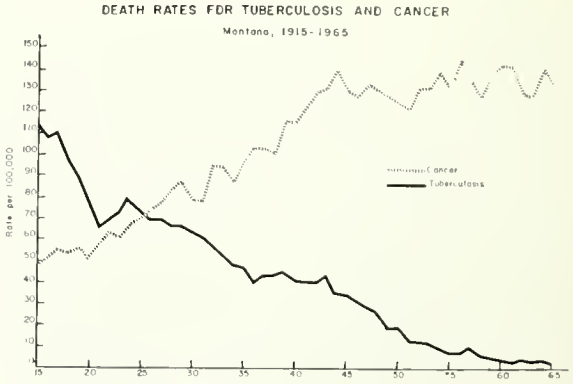
The 1965 legislature gave the SBH responsibility for the safety and cleanliness of swimming pools. The season for the use of outdoor pools in Montana is very short, but their use is very heavy.



Swimming Pools Must be Well Constructed with the Plans Reviewed and Approved Before Construction Begins. Although Not Adequate, the Staff Made Three Times More Inspections Than It Did During the Last Biennium. Swimming Pool Filters and Chemical Feed Equipment Are Examined as Part of the Inspection Procedure. To Improve Operation, the Staff Sponsored Three Schools for Swimming Pool Operators During the Spring of 1966. There Were 60 Operators in Attendance and Plans Are Underway to Hold These Schools Annually.

. . . PROTECTION AGAINST DISEASE

As the communicable diseases become controlled, the problems of the chronic diseases loom into concerns of major significance. Present day treatment and rehabilitation techniques are making it possible to restore many of those suffering from those diseases, once thought hopeless, to useful happy lives. The accompanying graph illustrates these changes. However, efforts in controlling the communicable diseases cannot be relaxed. The population is not as well immunized as it should be and optimistic as the tuberculosis rates are, this disease and syphilis could be eradicated—the scientific know-how is available.



In the **control of Heart Disease** emphasis is placed on education and the prevention of rheumatic fever and its complications.

A Streptococcal Identification Program Based on the Laboratory Examination of Throat Cultures of Ill Patients in Gallatin County Is Sponsored as a Pilot Project. It Is Providing Reliable Data on the Incidence of Strep-sore-throat and the Clinical Problems in Its Identification.

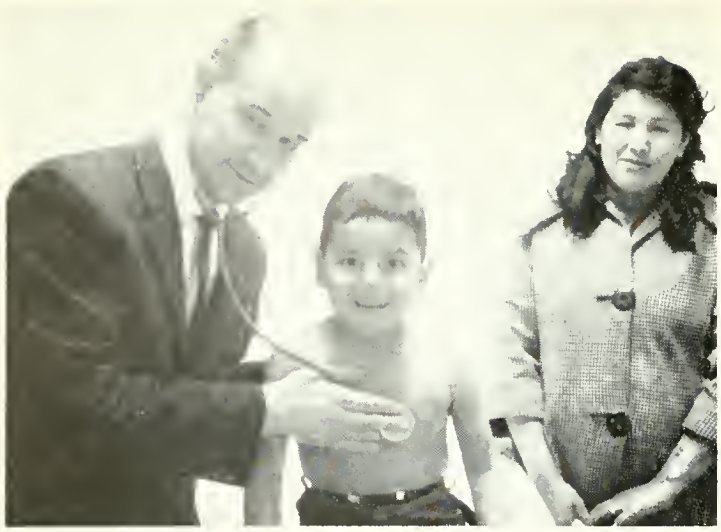
Penicillin is supplied on a continuing basis without charge to rheumatic fever patients who could not otherwise obtain it. This is to prevent strep infections and recurrences of rheumatic fever.

Public health nurses made 6,959 visits to patients with heart disease to assist in increasing patient understanding and aiding them in following their physician's recommendations. The educational program geared to college students with a history of rheumatic fever and heart disease continued during the first year of the biennium.

The **Heart Diagnostic Center** in Great Falls continues to offer a valuable service to a significant number of physicians and their patients. Of the State's 56 counties, patients have been referred by physicians in 51 of them.

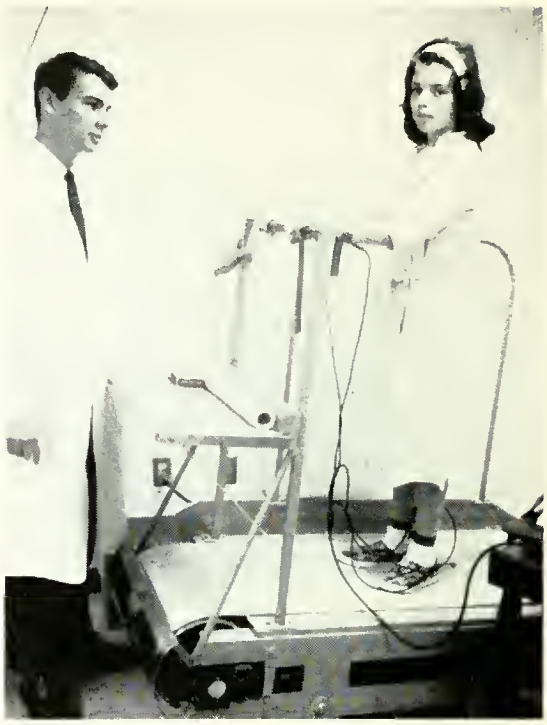
Of the 713 Patients Seen at the Center, 365 Were New Patients. A Young Patient and Her Grandmother Are Pictured With the Center's Director, While a Photograph Is Made of the Patient for Her Medical Record.

One of the Functions of the Public Health Nurse Is to Get Interval History Details from the Patient's Parent.



Each Child Is Examined by a Medical Specialist.

When Indicated, Exercise Tolerance Tests Are Given to Some Patients.



Following the diagnosis made by the specialists at the Center as indicated, 67 patients were referred to out-of-state centers for further studies and possible surgery, with 46 of them undergoing heart surgery.

NUMBER OF PATIENTS SEEN HEART DIAGNOSTIC CENTER

Rheumatic Fever and Rheumatic Valvular Heart Disease	134
Congenital Heart Disease	391
No Heart Disease (Functional Murmur)	170
Other	18
Total	713

The spiraling sophistication of technology in heart diagnostic laboratories has made it impossible to finance a continued updating of the facilities of the Montana Heart Diagnostic Center. Therefore, there were only six cardiac catheterizations and one angiogram done at the Center.

However, the Center serves as a "way station" for many patients if they ultimately need heart surgery. Some of them can be temporarily evaluated and "held" until they are suitable surgical candidates by evaluation at the Center, thus saving them a long and costly trip.

For many other patients, the evaluation at the Center is all that is needed, either on the basis of one examination or on the basis of follow-up over a period of several years. This is particularly significant in the care of the growing child with questionable functional murmur or very mild cardiac defect.

The Center also continues to function as a source of information in various aspects of heart disease and related services for both physicians and their patients.

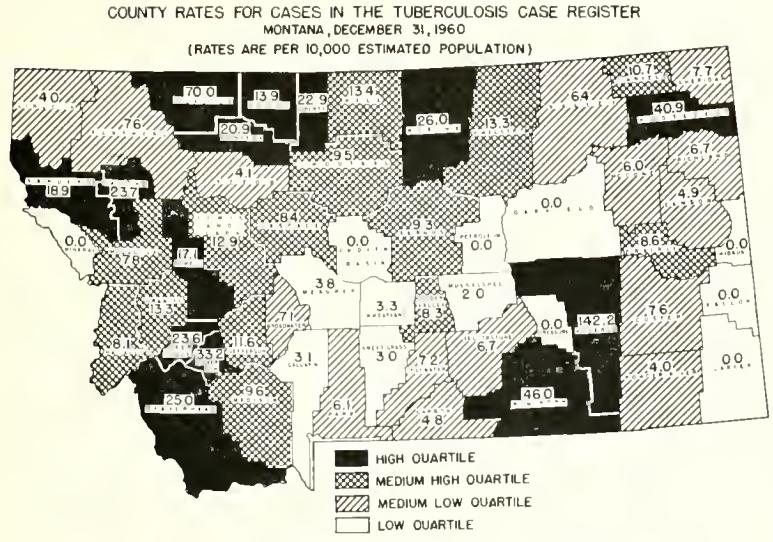
Aiding in cutting down the **Cancer** death rate are the Mary E. Swift Tumor Clinic in Butte and the Blegan-Honeycutt Memorial Tumor Clinic in Missoula. The SBH is pleased to assist in these clinics. The tumor register offers information to physicians and points up the needs in various program areas.

A joint medical-dental oral cancer detection demonstration is underway in the Butte-Anaconda area. The purpose of the demonstration is to reduce the mortality and morbidity from oral cancer through early detection and control. In addition to Seminars on the subject of "Oral Cancer," participants present their cases of suspected oral cancer to the Mary E. Swift Tumor Clinic in Butte.

The cases are studied and discussed by physicians and dentists and recommendations for care are made. During the biennium, public health nurses made a total of 1,696 visits to patients with cancer.

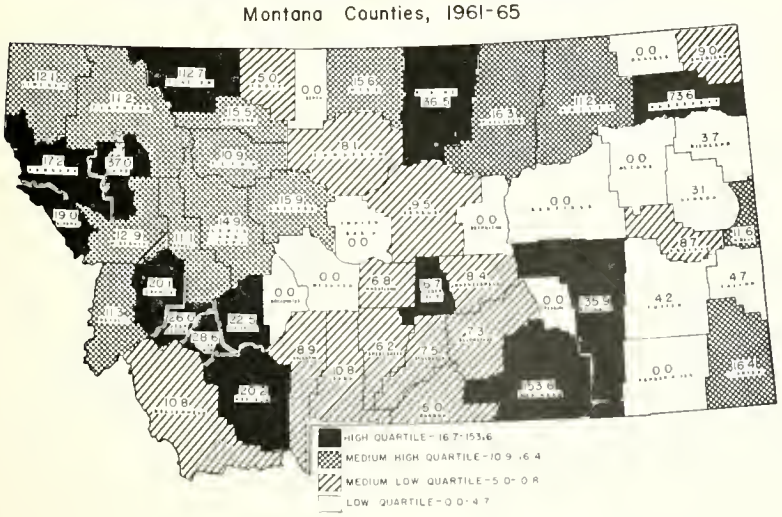
Workshops for nurses and education programs on breast and cervical cancer for women of child-bearing age were conducted in local areas.

Increased emphasis is planned in a program to prevent **heart disease, cancer and stroke.** The project is planned to determine the needs in Montana communities so that the best use of the medical knowledge may be made available for Montana citizens, to provide intensive health education as to the best means of preventing these diseases, and to establish the coordination of health activities so the citizens may have the best use of the available medical facilities. It is expected that it will be possible to develop a plan for improving or expanding services for heart, cancer and stroke patients in the State as a whole as a result of total community planning.



An effort to eradicate **Tuberculosis** is planned. During 1964, there were 121 cases of active tuberculosis discovered. In the calendar year 1965, 133 persons were found to have active tuberculosis. Any one of these ,if not found and treated, could spread the disease to other persons.

FIVE-YEAR ACTIVE TUBERCULOSIS CASE RATES:
Montana Counties, 1961-65



Comparing the Two Maps It Will Be Noted That There Isn't a Great Deal of Change in the Counties With the Highest Tuberculosis Rates as Disclosed by the Board's Case Register.

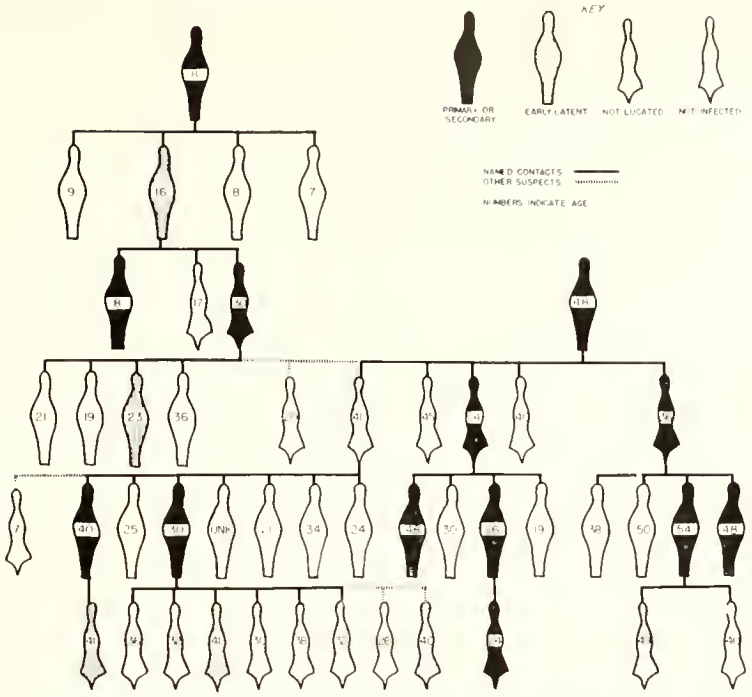
A Tuberculosis Case Register Is Maintained in the Silver Bow County Health Department to Provide Follow-up Services to Patients. Tuberculin Skin Testing Is Carried Out in Specified Age Groups to Help Determine the Focus of Infection of This Disease. Those With Positive Skin Tests Are X-Rayed.

The Board's Microbiology Laboratory Adopts New and More Definitive Tests for the Diagnosis of Tuberculosis as They Become Available.

The most hopeful sign for the future in the control of **syphilis** is the fact that from July 1, 1962 to July 1, 1964, forty cases of early latent syphilis were reported and from July 1, 1964 to July 1, 1966, 38 cases were reported of which only eleven were reported in the last half of the current biennium. This would seem to indicate that syphilis is being diagnosed and treated much earlier than previously, thus reducing the spread rate of the cases. If this type of incidence is a true reflection of actual incidence this is the first step toward eradication. The professional, community and school education programs are assisting in the apparent reduction.

The Staff in the V.D. Program Received Material Assistance From an Advisory Committee. The Committee Recommended a New Venereal Disease Law Which Requires That All Positive Laboratory Tests Be Reported to the Board; That an Additional V.D. Investigator Be Employed to Provide Better Epidemiologic Services; and That Drugs Be Provided to Physicians Without Charge for the Treatment of Gonorrhea. These Recommendations Have All Been Carried Out.

A SYPHILIS EPIDEMIOLOGIC CHAIN REPORTED TO THE STATE BOARD OF HEALTH, MONTANA, 1965



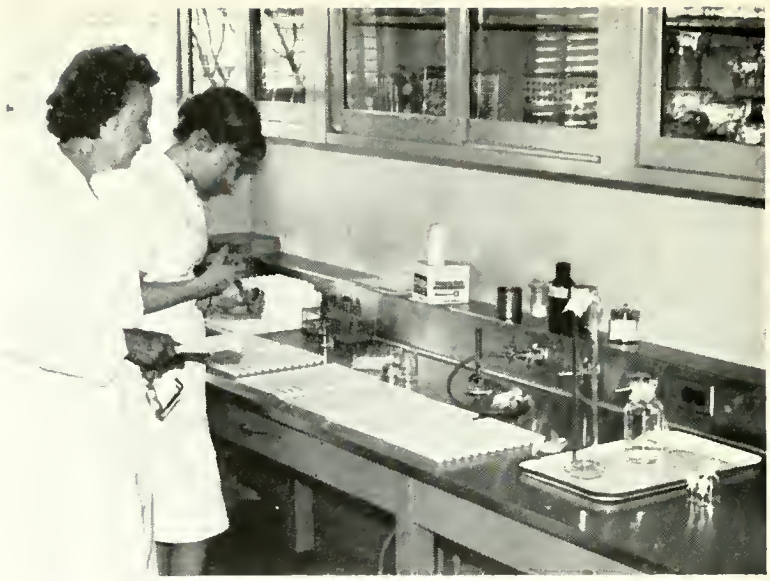
With a Chain of Infection Spreading From One Case of Syphilis as Shown Above, Infectious Syphilis Will Continue to Increase Unless the Chain Is Broken. The Number of Primary and Secondary Syphilis Cases Rose From 40 in the Last Biennium to 63 as of June 30, 1966.

Serologic Tests for Syphilis Number Over 35,000 Each Year. A New Test for the Detection of Syphilis Has Been Instituted and the Results Are Proving to be Valuable to Physicians in the Diagnosis of Difficult Cases.

To more adequately control **communicable diseases** for which protection by immunization level of the entire popula- program is underway to raise the overall immunizaiton level of the entire population of the State to 85% and to have the immunizations of infants completed by the time they are 14 months of age. Immunizations are recommended for DTP (diphtheria, tetanus, pertussis—whooping cough), polio, smallpox and measles.

Surveys conducted in 1965 revealed the immunization levels in the State to be low. As an example, levels of polio protection ranged from 52.9% to 88.2% and in one area of the State only 50% of the children under five years of age were adequately protected against DTP. The percentage of adequately immunized persons decreased with age. For instance, in the 15-39 age bracket only 13.1% of those interviewed had received boosters against diphtheria and tetanus within three years and only 7.4% of those over 40 had been immunized with a booster within three years.

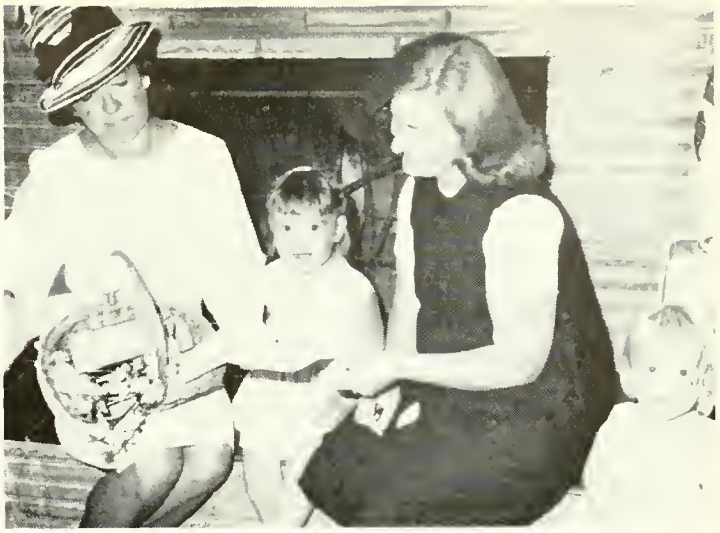
A card system has been developed so that each child will have a permanent record of his basic immunizations when they have been completed and there is a place on the card for recording boosters as they are obtained. DTP, polio and measles vaccines are made available to all physicians and clinics so they may administer them to preschool aged children.



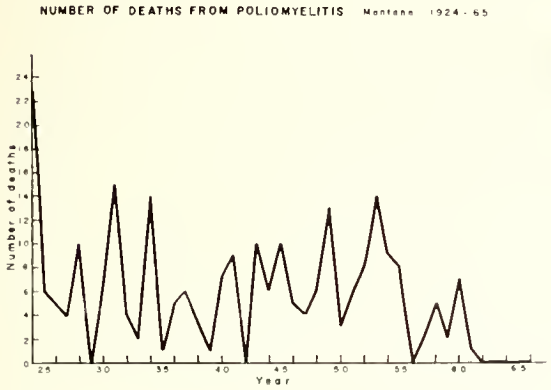
As a Part of the Immunization Survey, Virus Isolation Attempts in the Laboratory Resulted in Recovering Polio Type II and III Viruses from Sewage Samples Collected from a Large Municipal Sewage Plant. Types I and II Were Recovered from Rectal Swabs Collected at Well Child Conferences in the Southeast Part of the State.

To Assist the Staff Develop an Effective Program to Raise the Levels of Immunization, an Advisory Committee Was Named. They Are Pictured Above at a Meeting with the Staff. On This Committee Are Representatives from Each of the Montana Medical Association's Component Societies.

With the Rather Recent Availability of Measles Vaccine, Emphasis Is Placed on Getting Information on the Importance of This Immunization Out to Parents. Measles (Rubeola) Kills Approximately 500 Persons Annually in the Nation, While One Out of Six Cases Develops Complications. The Complications May Be Serious and Can Result in Encephalitis, Mental Retardation, Pnuemonia, Heart Disease and Hearing Disorders.



Welcome Wagon Hostesses, One of Whom Is Pictured, Include Immunization Information When They Make Their Calls on New Families Arriving in Their Communities. The Extension Homemakers and Jayceens Give Volunteer Services in the Immunization Program Also.

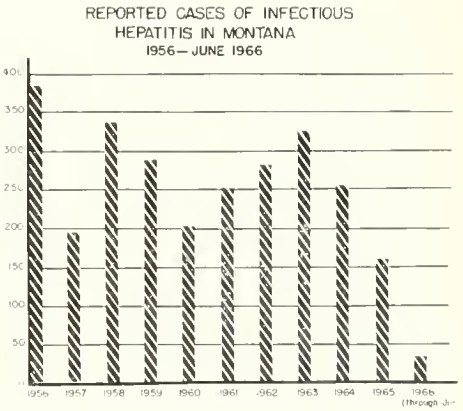


Among the acute communicable diseases, **influenza** led the list. There were 13,393 cases during this report period, with 9,660 occurring during March and April 1966. Influenza viruses A2 and B were proven in a sampling of the cases.

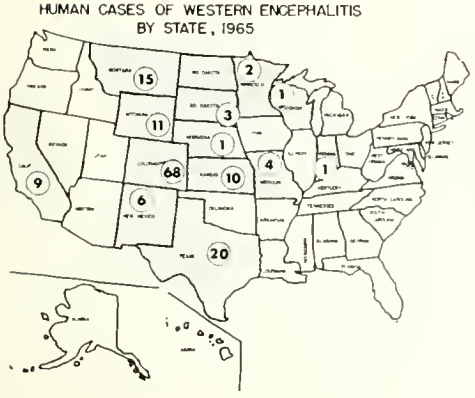
German Measles was reported in 3,966 persons. There is no apparent correlation seen this early between these cases and an increase in congenital anomalies in Montana. Emphasis is placed on the prevention of this disease during early pregnancy.

There were 17 cases of **diphtheria** reported in Big Horn County. Two clinical cases and two carriers of the disease were detected first on the Cheyenne Indian Reservation. Further investigation by the PHS Indian Health Division and the Board uncovered six additional carriers to these two cases.

There have been no **smallpox** cases reported in Montana for 13 years.



As Would Be Expected, Infectious Hepatitis continues on a Downward Trend. The Age-Specific Attack Rates in Montana Follow a Pattern Characteristic of Those in the Other Mountain States with the Attack Rate Almost as High Among Young Adults as in Children of School Age.

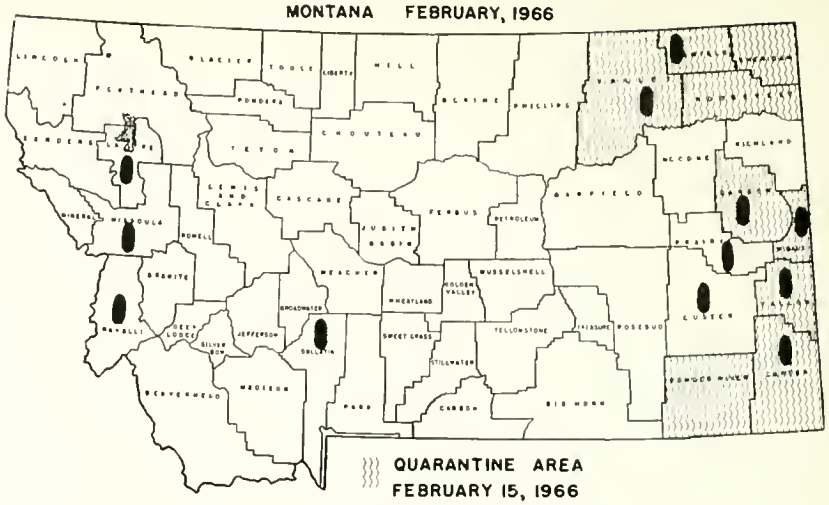


There Were 43 Reported Cases of Western Equine Encephalitis During 1965 in Animals, with 15 Reported Human Cases. A Request Was Made to the Communicable Disease Center of the Public Health Service and an "Instant Training Course" in Vector-Borne Diseases Was Presented. All Physicians and Other Interested Persons from the Counties Most Affected Were Invited to the Training Session.

Bat and Skunk Rabies Found in Montana Triggered Extensive Control Measures. The Livestock Sanitary Board, With Whom the SBH Staff Works Cooperatively, Quarantined the Areas as Shown on the Accompanying Map. The Cases of Reported Animal Rabies Are Shown by County. Both Professional and Public Information Programs Have Been Carried on as a Part of the Program to Prevent the Spread of This Disease.

RABIES QUARANTINE STATUS

MONTANA FEBRUARY, 1966

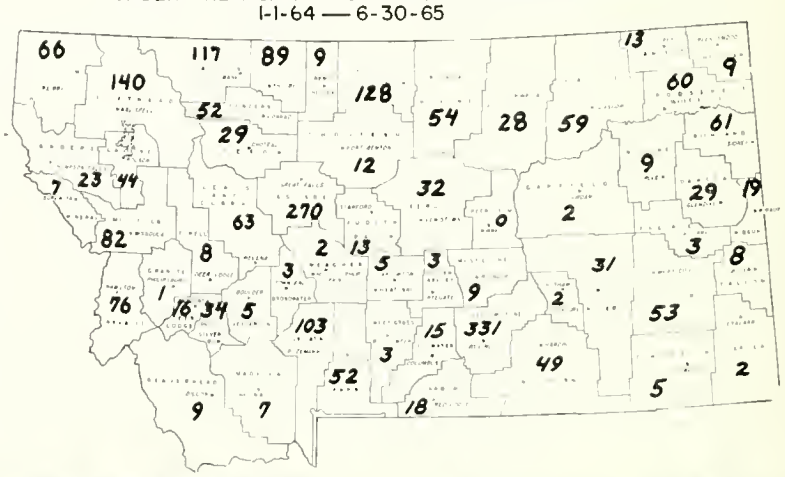


. . . HANDICAPPING CONDITIONS

PREVENTION - RESTORATION

Crippled Children's Services Continue to Provide Diagnostic and Treatment Facilities for Children Under 21 Years of Age Who Are Unable to Function to the Best of Their Abilities. The Conditions Which Are Accepted Are Those Which Are Amenable to Treatment. These Include Orthopedic and Neurological Conditions, Either Congenital or Acquired, Congenital Heart Disease, Neoplasms and Rheumatic Fever. Children Who Are Thought to be Mentally Retarded Are Not Excluded From the Program. During Calendar Years 1964 and 1965, 1,593 Children Were Seen at Crippled Children's Clinics. There Were 86 Congenital Heart Cases Referred for Heart Surgery Through Crippled Children's Services.

NUMBER OF CHILDREN RECEIVING PHYSICIANS' SERVICES UNDER THE MONTANA CRIPPLED CHILDRENS' PROGRAM
1-1-64 — 6-30-65



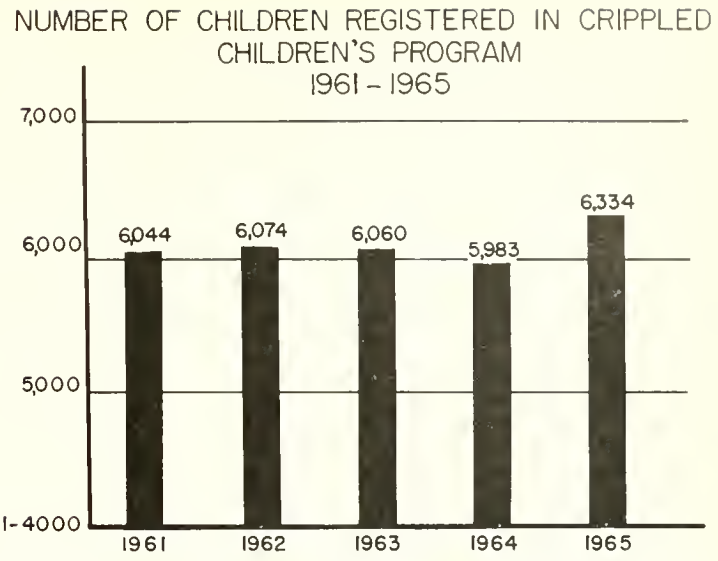
Records Are Reviewed When Making Clinic Preparations and Brought Up-to-date With Clinic Examination Findings and Recommendations.

(Photo courtesy Wallace H. Ruetton, Cut Bank)

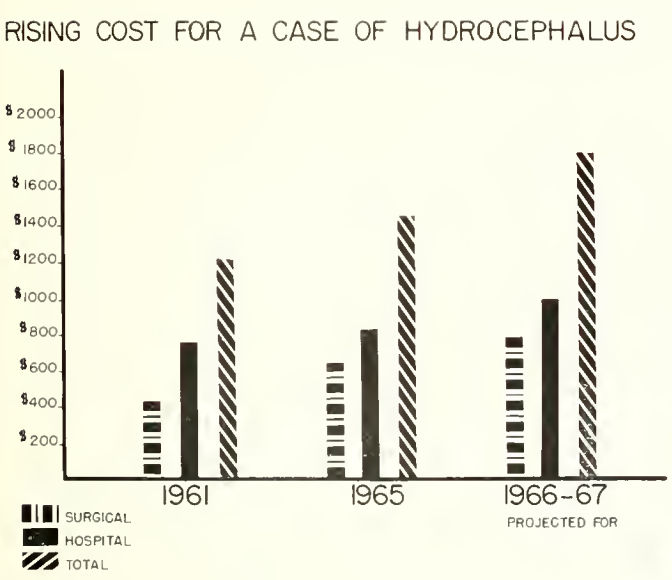
Volunteer Services at Crippled Children's Clinics Are Very Helpful.

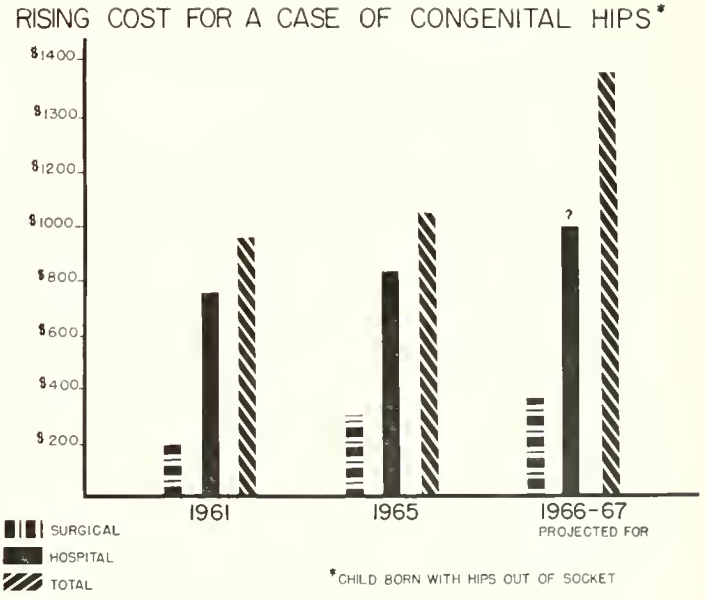
The Continued Cooperation of the Montana Physicians Who Give Care to the Children in the Crippled Children's Program Contributes to the Success of the Program.

Recommendations for Treatment May Include Physical Therapy.



A critical **financial problem** faces the Board's Crippled Children's Program. This has come about by rising costs. Hospital average costs per day have risen from $33.50 in 1961 to $41.00 in 1965 and projected figures for the future approximate $50.00. Furthermore, the Board was paying only 55% of the Montana Medical Association's fee schedule for surgery (including anesthesia) in 1961, 80% until July 1, 1966 when it was raised to 100%. The accompanying graphs reflect the rising cost for two typical cases—hydrocephalus and congenital hips (children born with their hips out of their sockets).





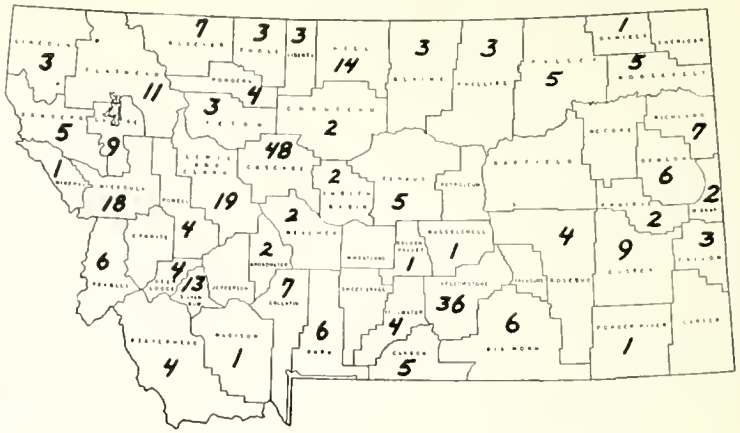
Diagnostic, case finding and consultation services are provided by the program. Financial assistance is given for treatment services when this cost is more than the family can provide. With costs rising as reflected above, there will either have to be more money appropriated or the services will have to be curtailed.

Another problem which exists is that there is no in-patient rehabilitation center in the State. This means some of the patients are not getting the care they need. The young adults and teen-age paraplegics present a special problem. Costs of $65.00 for care per day at established rehabilitation centers outside the State are more than a family or agency can provide for a long period of time. Such a center would be of help to the Division of Vocational Rehabilitation also.

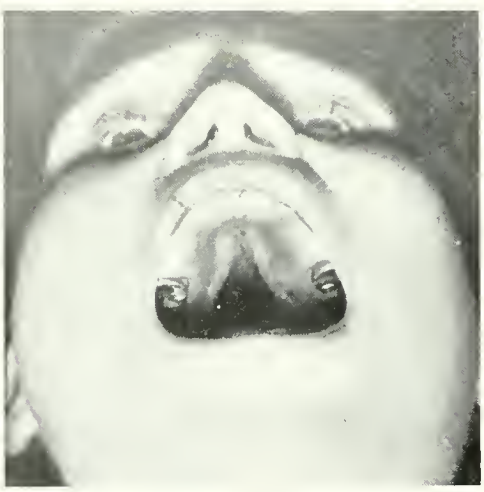
Providing diagnosis and financial assistance when needed does not always solve the problem of securing necessary care for a child. For this reason the State Board of Health has taken the leadership in developing some needed specialized resources. These include the Heart Diagnostic Center described on pages 11 and 12, the Cleft Palate Program and the Center for Cerebral Palsy and Handicapped Children.

Since the Organization of the Cleft Palate Program Ten Years Ago, 85% of the Children Born in Montana With Clefts Have Been Enrolled in the Board's Program. Because the Rehabilitation of a Child With a Cleft Involves a Surgical, Dental, Speech, Emotional and Financial Problem in Most Cases the Program Consists of Comprehensive Team Care for These Children. Planning for Care Is Available for Every Child Without Cost. If Families Can Pay for Recommended Procedures They Are Expected to Do So; If Not, Financial Assistance Is Available. Most Average Families Find the Long-range Comprehensive Care Required Is Beyond Their Financial Ability.

ACTIVE CASE LOAD—MONTANA CLEFT PALATE PROGRAM
6—66



A Baby With a Cleft Who Is on the Way to Rehabilitation Means Happiness to the Mother and a More Normal Life Ahead for the Baby.

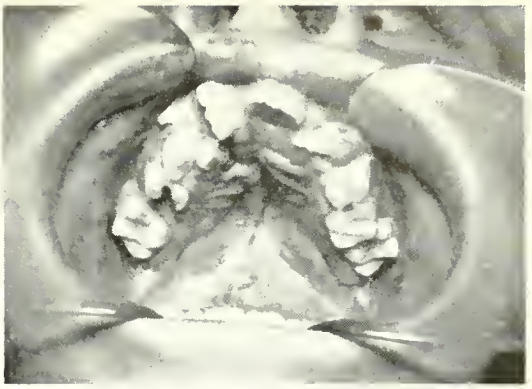


(L) A Cleft Palate Before Repair and (R) The Same Cleft Closed by a Prosthetic Device.

Three Cleft Palate Teams are sponsored at Billings, Great Falls and Helena. The teams are composed of a surgeon, pediatrician, prosthodontist, orthodontist, speech therapist, coordinator, medical social consultant, public health nurse and on some teams there is an audiologist, pedodontist and psychologist.

Since the program began 559 children have received some team care. Of these there are 312 still active, 10 are under private care, 17 are over the 21-age limit, 9 are in mental institutions, 23 have died, 15 are uninterested in further care, 102 have moved out of the State, 8 cannot be located and 63 have received maximum correction. Many of the children who moved out of the State had nearly reached maximum correction and many of the active cases are nearly completed but final treatment must await growth. Most of the over-age and those uninterested in further care are older children who came into the program late.

Montana's program continues to illustrate the success of the "team concept" of care. The comprehensive services given the children are enabling them to face life with good surgical repair, good speech and without vocational or emotional handicaps because they were born with a cleft. The valuable information derived from this program is making a contribution to the whole field of cleft palate rehabilitation.



Many Children With Clefts Need Their Teeth Strengthened.

A Child With a Perceptual Problem as Well as an Orthopedic Problem Is Given Individual Assistance at the Center for Cerebral Palsy and Handicapped Children.

The **Center for Cerebral Palsy and Handicapped Children** in Billings continues to provide a wide variety of services for children with multiple handicapping conditions as the accompanying table indicates. The services are provided by a team of specialists and eligible children are accepted from the entire State. The Center is sponsored by the State Board of Health, Billings School District No. 2 and Eastern Montana College.

The Services at the Center Have Been Strengthened by (1) Additional Speech and Occupational Therapy; (2) the Services Provided by the SBH Conservation of Hearing Program; the Picture on the Left Above Illustrates Education for the "Hard of Hearing"; (3) the Initiation of a Mental Retardation Diagnostic Clinic on a Pilot Basis; (4) Greater Emphasis in the Area of Special Education in the Teacher Training Program of the College. Pictured on the Right Above a Student Teacher Conducts a Class. (5) Broadening the Play Therapy Program and (6) Placing Greater Emphasis on Parent Counseling.

The greatest need of the Center continues to be more adequate housing. There is no room for much needed additional staff members. These should include additional special education teachers, a part-time psychologist and a social worker.

KINDS OF SERVICE PROVIDED WITH NUMBERS OF CHILDREN RECEIVING EACH AT THE CENTER FOR CEREBRAL PALSY AND HANDICAPPED CHILDREN

July 1, 1964 to June 30, 1966
and
CUMULATIVE TOTALS SINCE 1947

		1964-66	Since 1947
Diagnosis and Evaluation Clinics:			
Medical	44		
Mental Retardation	16		
Cleft Palate	12	72	405
Children Seen for Initial Evaluation:			
Medical Clinic	91		
Mental Retardation Clinic	23		
Cleft Palate Clinic	27	141	729
Children Seen for Re-evaluation:			
Medical Clinic	229		
Mental Retardation Clinic	10		
Cleft Palate Clinic	79	318	2437
Children Attending Full Time School: (Does not include six week summer sessions)		54	319
Children Released for Other Placement:		21	150
Children Receiving Psychological Testing:			
Evaluations and Re-evaluations		451	1435
Individual Children at Medical Clinics and/or Speech and Hearing Problems:		764	

CASE EVALUATIONS BY DISORDER AT CENTER FOR CEREBRAL PALSY AND HANDICAPPED CHILDREN

July 1, 1964 to June 30, 1966

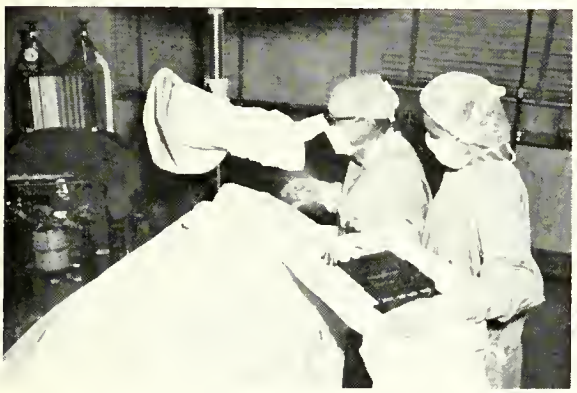
Disorder	No. Evaluations
Cerebral Palsy	261
Other orthopedic problems including spina bifida, muscular dystrophy, Amytonia congenita, etc.	20
Miscellaneous, including retarded, epileptics, post encephalitis, etc.	76
Hearing problems	146
Cleft Lip and Palate: (Cleft palate clinic)	110
(Speech evaluation diagnosis)	92
Other speech and/or language handicaps: (Speech diagnosis)	272
(Deferred)	85
TOTAL	1062

A comprehensive **"Conservation of Hearing Program"** has been initiated. Services to children began in August 1964 and extended to adults in January 1965. The program includes education, prevention, screening and referral services for medical audiological evaluation, surgical, prosthetic or other care if indicated.

Screening Services Available Without Charge Are Designed to Eliminate from Further Consideration the Vast Majority Whose Hearing Is Within Normal Limits. Volunteers Are Trained to Carry Out Initial Screening Tasks. This Extends the Educational and Screening Process to Increased Numbers of People —One of Whom Is Taking the Test.

More than 5,000 children have been screened in five school projects and other referrals from practicing physicians. The screening of adults, in addition to physician referrals, have included projects at the State Training School, the Vocational School for Girls, the Montana Veterans' Home, the members of the 1965 Legislature, the State Board of Health staff and individuals attending the 1966 annual meetings of the Montana Tuberculosis Association and the Montana Public Health Association.

Audiological Evaluations Are Made on Physician Referral. More Than 200 Complete Evaluations Have Been Made by the Board's Audiologist Since the Program Was Initiated. A Second Audiologist Has Been Employed for the Beginning of the Next Fiscal Year. A Second Sound-proof Room Was Installed by the Board in Space Provided by Shodair Hospital in Helena. The Other Was Installed Some Time Ago at the Center for Cerebral Palsy and Handicapped Children in Billings. Both Centers Have Complete Audiologic Diagnostic Equipment and All the Apparatus Necessary to Conduct the Latest Tests.



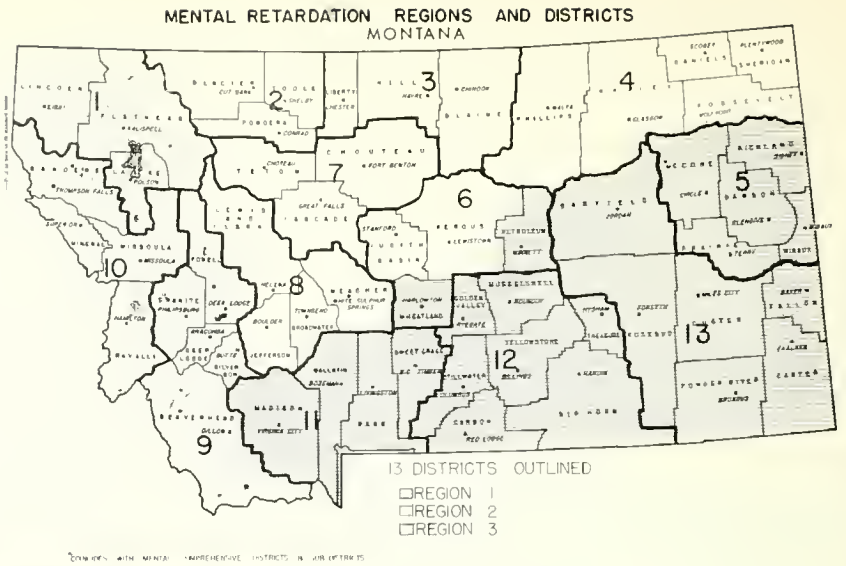
Audiological Evaluations, Surgery, Limited Medical Care and Additional Rehabilitative Services Are Provided for Children Eligible Under the Crippled Children's Program. Fees for These Services Are Charged for Adults.

"New Hope for Montana's Mentally Retarded" has come about as a Result of State Planning and Implementation Projects. Following Governor Babcock's Appointment of the SBH as the State Authority of Mental Retardation. Planning Citizens' Committees Were Formed.
A State Planning Committee (pictured on the right at its first meeting) with 56 Representatives from State Agencies and Organizations Having Responsibility for and Interest in the Mentally Retarded, Developed the Plan With the Help of Local Committees.

Committees organized in each of the State's 56 counties discovered early that there was a need for public understanding of the modern concepts of mental retardation, of the fact that there is now new scientific information available to assist in combating the problem and how it can be utilized. Virtually hundreds of citizens crossing every social, professional and economic strata of society were involved and they attempted to determine the action needed and the resources available as well as those that must be provided.

The report of the plan includes the findings and recommendations. Some of the recommendations can best be met at the local level, others by districts or regions as indicated on the accompanying map. How it is done depends on numbers to be served, the solving of financial problems and the probable availability of professional personnel. Copies of the report are available on request to the SBH.

Before the Plan Was Completely Finished Implementing the Findings Already Known Began. An Implementation Workshop With Representatives Invited from Every County Was Held in December 1965. One of the Group Discussions at This Workshop Is Pictured Below. In the Spring of 1966 Meetings Were Held in Each District to Report on Progress and to Develop More Specific Plans for Implementation.



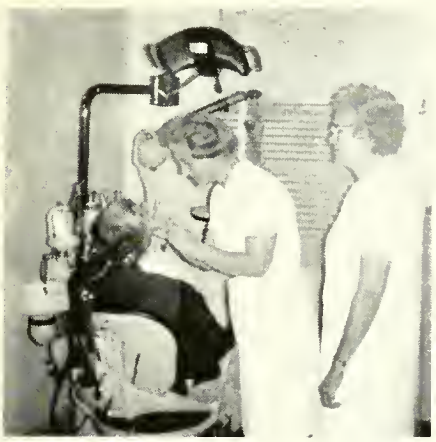
The Appointment of an Interagency Council on Mental Retardation by the Governor Was a Major Step in Implementing the Recommendation of the State Plan. Agencies Represented Are: The Board of Health, The Department of Public Instruction, the Department of Public Welfare, Division of Vocational Rehabilitation, Employment Counseling of the Unemployment Compensation Commission; the Montana University System and the Training School and Hospital. There Are Two Advisors to the Council Who Are Pediatricians and Two from the Montana Association for Retarded Children and Adults. Through the Interagency Council It Will Be Possible to Coordinate State Services and Programs Which in Turn Should Lead to Coordination at the Local Level. No One Agency or Group Can Meet the Needs of the Mentally Retarded Alone—It Requires a Comprehensive Effort With All Agencies and Organizations Cooperating. The Council is shown in the lower picture on the left.

In the area of prevention, the SBH is carrying out a program for the early detection of phenylketonuria, one of the causes of mental retardation. The 1965 legislature passed a law requiring a blood test on every newborn infant. A blood sample on each infant is tested and the SBH microbiology laboratory each year performs nearly 10,000 tests to aid in diagnosis of this condition.

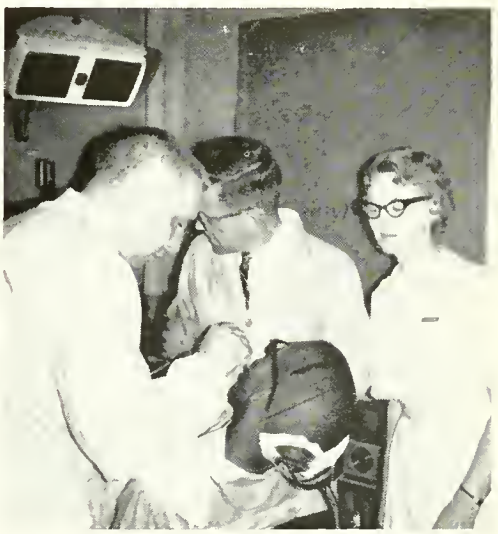
Following the physicians' diagnosis of PKU, at his request the Board's nutritionist provides dietary consultation to the family. Because the child lacks the enzyme to properly metabolize certain protein foods, these foods must be eliminated or restricted in the diet. A low phenylalanine product has been developed to substitute for these foods. Diets using this formula along with foods that have very little phenylala-

nine, must be carefully planned for each child. The special diet must be utilized for many years and in addition may need to be altered from time to time depending upon the child's condition, hence the services of the nutritionist are provided.

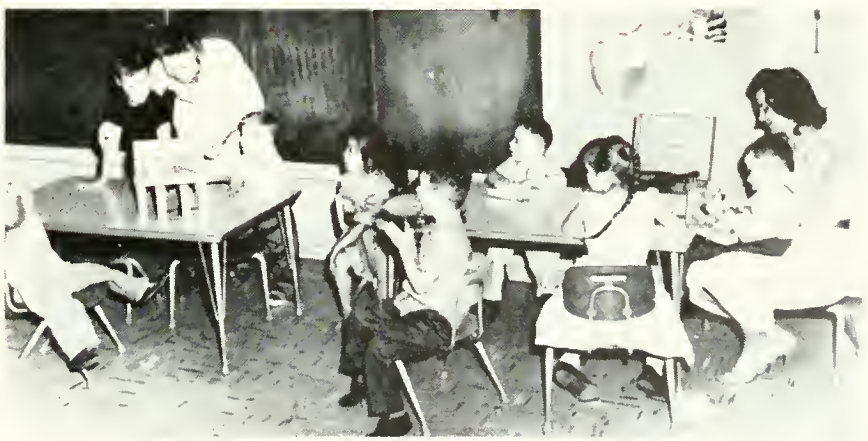
Early case-finding is improving with the awareness and acceptance of the citizens, parents, and through the in-service training of professional staffs.



The SBH Initiated a Program in the Fall of 1965 to Improve the Oral Hygiene of the Children at the Montana State Training School at Boulder and to Carry Out Educational Programs in Proper Oral Hygiene Practices. One of the 650 Children Who Have Received Oral Prophylaxis Is Pictured on the Left.



The Program Will Become a Part of the Dental Care Training Demonstration Program Which Is Scheduled to Begin in the Fall of 1966. Instruction for Dentists in the State Who Are Interested in Working With the Mentally Retarded, Cerebral Palsy and Children With Other Handicaps, Will Be Conducted at the School. To Prepare Instructors for the Program, the SBH Recently Arranged for Five Montana Practicing Dentists to Take Courses at Either the Columbia University or the Univercity of Pennsylvania Dental Schools.



The Number of Classrooms for the Educable Retardates Are Multiplying Rapidly and Some Progress Is Being Made in the Number of Elementary Classrooms for the Trainable. Interest in Nursery or Kindergarten Programs, to Include the Retarded, Is Growing and the Head Start Programs Are Contributing to the Early Education of Many of These Children.

Educational Programs for Older Persons Place Emphasis on the 80% Who Would Be Able to Support Themselves if Properly Trained and Supervised, as Is the Young Man Pictured at Work in a Greenhouse. Employers Are Learning that the Mentally Retarded Placed on the Job Can Do Well, Become Faithful and Competent Workers. High School Work Experience Programs Are Becoming More Numerous and Demonstrate the Abilities of the Retarded.

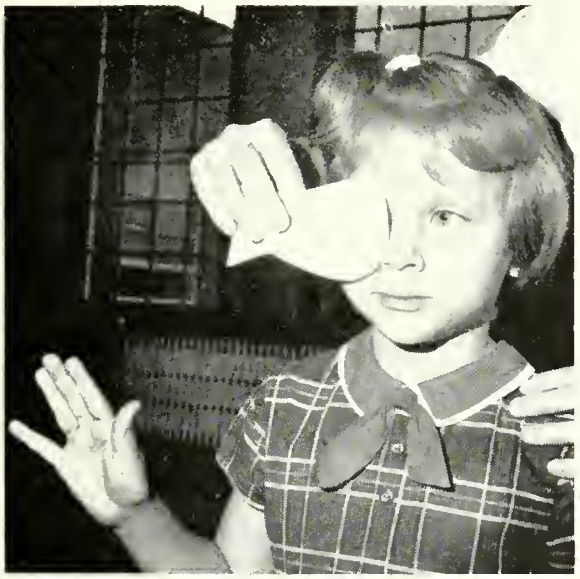
A Small Beginning Is Being Made in Two Areas of the State in the Establishment of Sheltered Workshops for the Retarded and There Is Interest in Another Region in Developing One. Community Services Such as This Are Needed in Regional Centers to Prepare Adult Retardates for Work in Their Home Communities and to Give Them Opportunity for Work in a Supervised and Sheltered Environment for Those Who Need It. The Goal of Community Services Is to Help the Retarded Attain Satisfactory Social Adjustments, Reasonable Economic Self-sufficiency and a Fuller Measure of Personal Contentment.

A Complete Physical Examination by a Pediatrician Is a Part of the Diagnostic Procedure at the Mental Retardation Evaluation Clinic Which Has Been Started on a Pilot Basis at the Center for Cerebral Palsy and Handicapped Children in Billings.

The Results of Psychological Testing Together With the Medical and Social History Gathered from Physicians, Public Health Nurses and Parents, Speech and Hearing Evaluation Reports All Form Vital Information for Consideration by a Team of Specialists.

If More Information Is Needed, a Wide Spectrum of Medical Diagnostic Tests and Examinations Are Avaliable Either Through Local Hospital and Clinic Facilities or Through Cooperating Medical Laboratories. The Parents Are Advised of the Team's Recommendations and Are Given Assistance in Making Plans for Their Child. A Parent Conference Is Pictured on the right.

It is hoped to extend diagnostic services to other parts of the State. A second diagnostic clinic is to be initiated by the SBH at the beginning of the next biennium in Missoula. It will be developed in cooperation with the Missoula City-County Health Department, and it is hoped some area-wide services can be established in Great Falls.

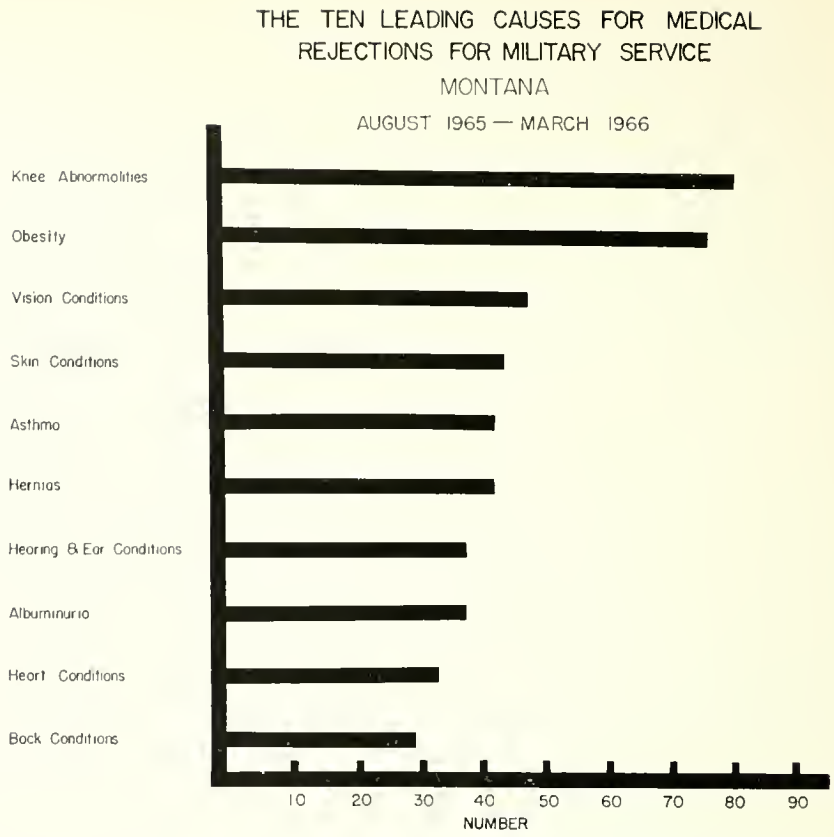


Fhoto courtesy Greot Falls Tribune.

The Child Pictured at the Left Is One of 7016 Children Given a Pre-school Screening Vision Test in the SBH Program Aimed to Detect Early Cases of Suspected Amblyopia (Lazy Eye). The Enthusiasm of the Volunteers Who Have Participated in This Program Has Accelerated. There Have Been 1,743 Volunteers Trained in 16 Counties to Work in the Program. Of the Childern Screened, 249 or 3.5% Were Referred for Examination by an Eye Specialist, and Advised to Follow-through With Any Treatment He Advises. Participating in a Sight-Saving Program Is So Satisfying the Volunteers Indicate Interest in Carrying the Program Out on an Annual Basis.

A **Health Referral and Counseling Program** was initiated in July 1965 to try to motivate the young men who have been rejected for Military Service for medical or psychiatric reasons to seek treatment when indicated. There were 1,105 rejected from the 3,709 examined between August 1965 and March 1966. Of the rejectees there were 697 who accepted counseling service when interviewed, and 590 of them were contacted by local public health nurses.

Approximately One-third of the Men Examined at the Armed Forces Examining Station for Military Service in Butte Are Rejected Because of Medical or Psychiatric Reasons. The Leading Causes of These Rejections Are Shown in the Accompanying Graph.

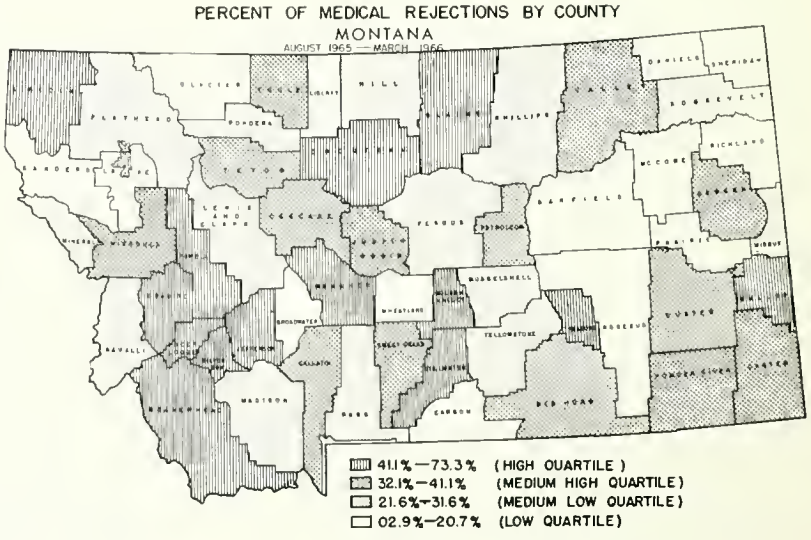


The greatest number of referrals—124—were made to private physicians and 86 received care to date. The Division of Vocational Rehabilitation ranked second in the number of referrals which together with those to the Division of Indian Health of the PHS, the Montana Employment Service, Child Health Services of the SBH, the Department of Public Welfare and the Neighborhood Youth Corps there were 103.

Of the remaining 466 who were interviewed, some had spontaneously obtained care after the interview in Butte, or were already under medical care of the time of their pre-induction examination. In other cases they could not be contacted by the nurse.

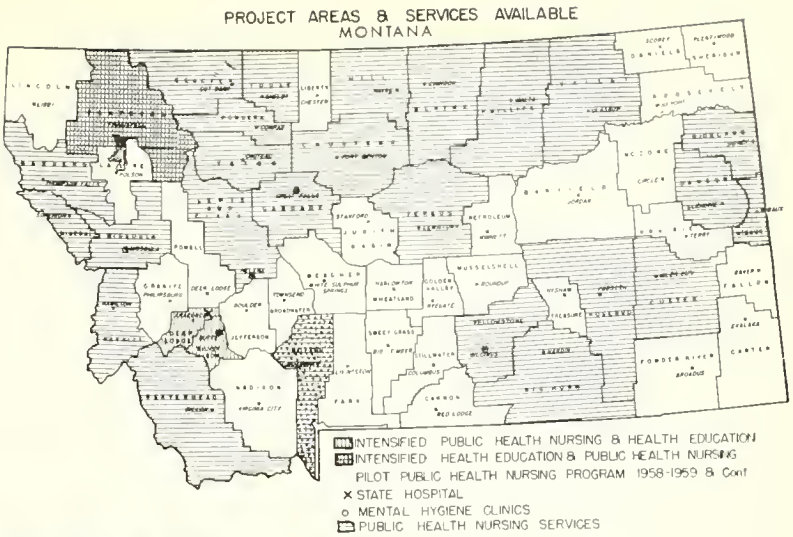
It appears that these young men who were rejected do not understand the impact of their medical problems if not treated or corrected. It would seem that adolescents could assume responsibility to place themselves under medical care; however, it is not happening with this particular group. They assume responsibility for themselves only within the framework of their knowledge so it is evident more intensive education is needed. Many of them have not completed high school and usually have not gone much farther than the ninth grade. Most of them do not have steady jobs.

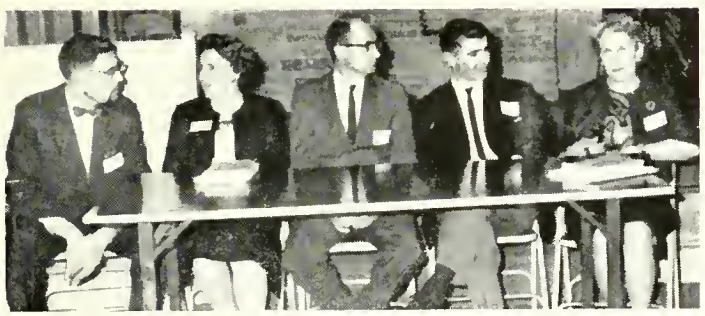
It is expected other reasons, too, will be found that account for the fact that these men and women turn up between ages of 18 and 26 with undiagnosed conditions, or with conditions that were diagnosed but not corrected.



"Family Health Services for the Mentally Ill and Their Families," a six-year demonstration project in mental health, came to an end on January 31, 1966. The project provided public health nursing and health education services.

Intensified services were provided in Silver Bow and Deer Lodge Counties with Health Education also provided in Flathead County. The program included the State's 33 counties with local public health nursing services.





Close Working Relationships Were Maintained Between the Board's Staff, the Montana State Hospital, the Montana Association for Mental Health, Practicing Physicians, Citizen Groups and Agencies. State Agency Representatives Are Pictured on the Left as They Participated in a Mental Health Workshop.

The Patient's Family Physician Was Found to Be the Key to His Continued Treatment. The Project Demonstrated that the Public Health Nurse Can Provide Assistance to the Physician in His Care of the Patient Both Before and After Hospitalization. The Physicians Evaluated Their Services Highly. Frequent Conferences (one pictured) Between the Nursing Service and Practicing Physicians Were Found Helpful. Close Working Relationships Between the Public Health Staffs, the State Hospital Staff and the Private Physicians Were Found to Be of Benefit to the Patients and Their Families. Case Conferences Between the Staffs of Local Agencies Providing Services Were Found to Be Valuable in Affecting a Coordinated Approach to Family Problems.

The Primary Goal for Nursing Service Was to Help Patients Improve Their Functioning in the Area of Daily Living, by Dealing With the Problems Faced by the Patient in His Attempt to Adjust to Family and Community.

In addition to the patients' needs in the area of daily living, other needs included work experiences or management of income, the ability to establish relationships with persons outside the home and the need for enjoyment from life through recreation.

The Nurses found they had a major role in helping the family develop some ability in relating to and accepting the mentally ill family member whether he is hospitalized or is at home. They found that their services to the mentally ill were needed more frequently during the first few months after hospitalization and during periods of crisis; the length of time a patient is able to stay out of the hospital may not be an indication of his "wellness" but may be due to the "climate of the home" and the understanding of the other members of the family.

Through the educational aspects of the program there is evidence of changing attitudes from indifference or apathy to active interest in mental health; from thinking mental health meant "insanity" to thinking of mental health in positive terms—building good mental health, developing a healthy personality involving day-by-day living; from being afraid of a patient coming home from the hospital to thinking of how he can be treated and helped in his adjustment to his home.

"Group Discussion" Proved to Be the Most Useful "Single" Health Education Technique, With Persons Professionally Trained in Mental Health Serving in a Resource Capacity.

Community organization for the promotion of the project objectives in health education was highly successful in one county. Through this organization a county-wide educational program in mental health was carried out. Through this local leadership evolved which was instrumental in getting local psychiatric services for the first time in the county and the employment of a psychologist on the public school staff. Their organization grew into a local Mental Health Association with the professional persons in the community becoming a coordinated group searching for ways and means to bring the additional professional personnel into the area and to fill some of the unmet needs in the community.

Although the project has ended, plans are underway to implement the project aims and utilize the findings. The public health nursing consultant position in mental health has been retained. Liaison between the Board's staff and the State Hospital will continue and the mental health register will be maintained. Consultation in the mental health aspects of public health nursing will continue. Orientation sessions will be offered annually so that each public health nurse can spend a week at Montana State Hospital and it is hoped more Hospital staff members can visit local public health services. The mental health education will be incorporated in on-going health education programs where appropriate.

To evaluate the available **Emergency Medical Services** in Montana and to meet the needs of training for personnel, a study is underway. It was initiated by the SBH on January 1, 1966. The study includes a survey of transportation facilities for the injured, equipment for ambulances, the preparation of the personnel in care of the injured, methods of dispatch and other emergency resources.

A survey of hospital emergency rooms to determine the degree of communication and cooperation between the hospital and the ambulance personnel is also included in the study.

The Operators of About 25% of the Estimated Number of Ambulance Services in the State Have Been Interviewed, and It Is Expected All the Interviews Will Be Completed by November 1, 1966. The Interview Is Based on Questionnaires and Guides the SBH Staff Has Designed to Meet the Needs of the Study.

Following the evaluation of the survey results, a training program for ambulance personnel will be offered to the personnel in all the services and at a later date a re-evaluation is proposed to note the improvement of services and to determine additional needs, if any.

The **Emergency Health Planning Program** is designed to prepare for natural disaster as well as for civil defense preparation. The interest in the Medical Self-Help training course is high. During the 1965 and 1966 fiscal years there were 518 classes conducted and 20,352 students enrolled. This brings the total number of persons who completed the training course to 21,786.

The Main Emphasis of the Activities Relating to the Packaged Disaster Hospitals Has Been in the Replacement of Deteriorated Items in the 11 Emergency Hospitals. Some of These Items Are Pictured Above. These Hospitals Are Located at Billings, Bozeman, Butte, Dillon, Kalispell, Lewistown, Libby, Missoula, Miles City, Shelby and Warm Springs.

This is a "Ward Section" of a Packaged Hospital.

To help communities implement the services provided by the emergency hospitals in emergency health planning, two workshops were held, one in Bozeman and one in Missoula.

. . . HEALTH CARE
IMPROVEMENT - CERTIFICATION

The on-going programs designated to provide or contribute to **health care**, together with the new responsibilities brought about by "medicare," vary all the way from activities directed to improve nutrition to the construction and certification of hospitals.

The on-going programs involve nutrition consultation in chronic disease, consultation in geriatric rehabilitative nursing, nursing care in the home, and the licensing and construction program of hospitals and long-term care facilities.

The growth of these programs is illustrated by the increase over the last biennium in hospitals and long-term care facilities (nursing, personal care and boarding homes). The number of licensed hospitals has risen from 66 to 73, and the long-term facilities from 97 to 102.

The number of beds in general hospitals has risen from 3,452 to 3,575 and in long-term care facilities from 2,437 to 3,538. Of this 1,101 bed increase, 722 beds are in nursing homes, 112 in personal care homes and 267 in boarding homes.

The responsibilities assumed when the SBH was designated as the State agency responsible for administering the health aspects of the medicare law include the certification, coordination and consultation to the providers of care. The providers include the hospitals, extended care facilities and home health care agencies. Responsibility for the home health care agencies also includes assistance to local agencies interested in developing home health services. The "Certification of the Independent Laboratories" in the State is also included.

The Coordination and Cooperation Between the Staffs Working in These Two Facets of Health Care Began as Soon as the Medicare Responsibilities Were Assigned to the Board. A Joint Conference Between the Hospital Construction and Medicare Staff Members Is Shown at the Right.

Under the Medicare Responsibilities, Inspection and the Surveying of the Hospitals of the State Had Been Completed so that Recommendations for Certification Were Forwarded to the Social Security Administration for 68 of the Existing Hospitals. The Medical Director Held Conferences One of Which Is Pictured at the Left with the Chief of Staff (L) and the Hospital Administrator (R) in the Hospitals. The Extended Care Facilities (Nursing Homes) Must Be Certified for Participaiton in the Medicare Program by January 1, 1967, and Work Toward This End Is Underway.

Consultation Is Given to the Providers of Care, Including Nursing and Nutrition Services. Constant Surveillance, Reinspection of All the Existing Hospital and Extended Care Staff Facilities Will Continue and the New Ones Will Be Included as They Are Constructed.

Nutrition consultation is offered to the many health facilities which do not have this help in the local community. The nutritionist helps to improve food services by teaching menu planning and modified diets with emphasis on the improvement of food and diets for the ill and aging.

Visits Have Been Made by the Nutrition Consultant to Two-thirds of All the Hospitals and Nursing Homes in the State.

Additional help in nutrition will be provided in the next biennium by the distribution of the 1966 revised edition of the **Dietary Handbook for Small Hospitals and Extended Care Facilities.** Material for the new **Handbook** was prepared by the Montana Dietetic Association and edited by the Board's staff.

Nutrition workshops bring administrators, nurses and dietary employees together to discuss their problems and answer their questions about nutrition and diets.

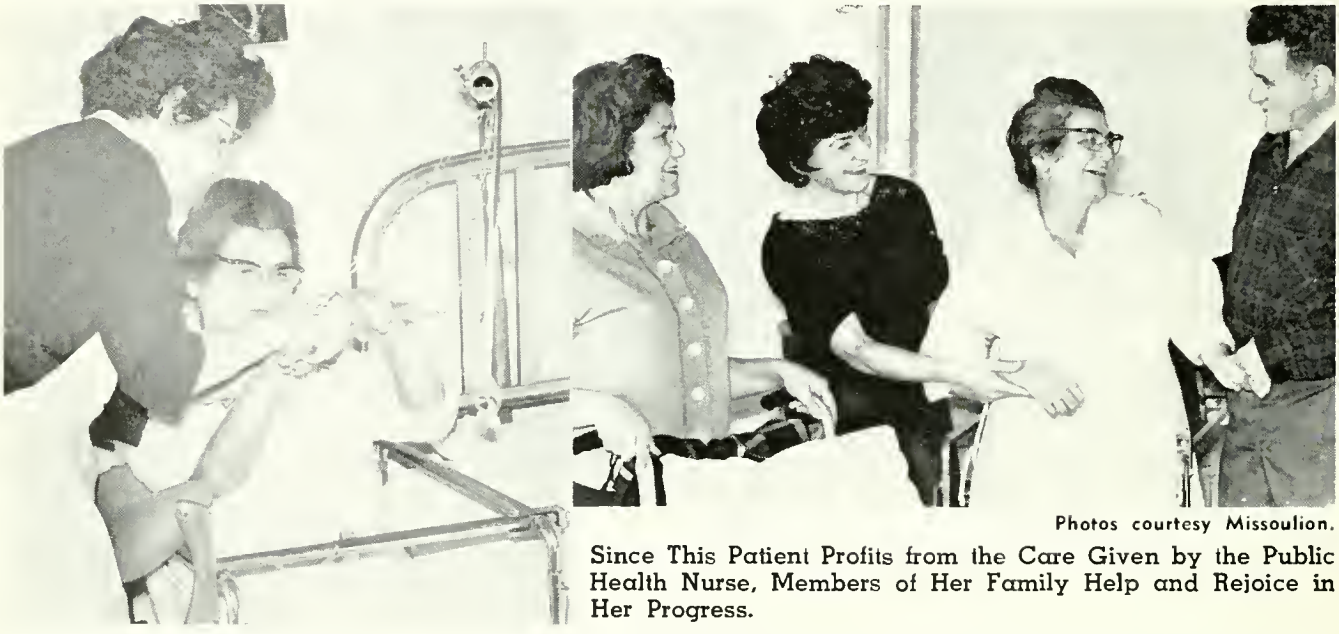
An adjunct to improved care for the sick, disabled and aged is the institution of **geriatric rehabilitative nursing** in the nursing homes of the State. Many of the things generally taken for granted in daily life become major problems for patients suffering with chronic disabling disease. Rehabilitative nursing brings rewards when the patient learns to feed and dress himself; learns to walk again and function safely in the bathroom, and best of all, when the patient can return to his own home. Even patients who do not progress enough to go home, are happier in their "home away from home" if they can attain these skills again.

This relatively new field of nursing requires special skills and knowledge in the management of chronic disease and the aging process. The Board's staff provides this type of training for the nurses in the skilled nursing homes so that they may become adept in providing these services when prescribed by the patients' physicians.

Four years ago **nursing service in the home** was established in three Montana Counties to meet the needs of the sick, disabled and aged who were living at home. Public health nurses in Missoula, Ravalli and Richland Counties provide individualized nursing care to make it possible for 343 patients to return to satisfying living or to die in dignity.

Photo courtesy Missoulion.

To Aid the Disabled Patient Learn to Feed Himself, Specially Adapted Dishes, Glasses and Silverware Are Used. Food Has More Flavor and the Appetite Improves When, After Several Months of Being Fed by Someone Else, the Patient Can Learn to Feed Himself Again.



Photos courtesy Missoulion.

Since This Patient Profits from the Care Given by the Public Health Nurse, Members of Her Family Help and Rejoice in Her Progress.

Private physician referrals for nursing care at home in these three counties have increased 48.3% over the last biennial period. Patients diagnosed with cancer, heart and circulatory diseases, diabetes, arthritis and stroke continue to lead in the numbers of patients receiving this nursing care.

Private patients paid a fee for the service which was based on the ability to pay, which also added to the county revenues. These payments made it possible to increase nursing care to persons at home.

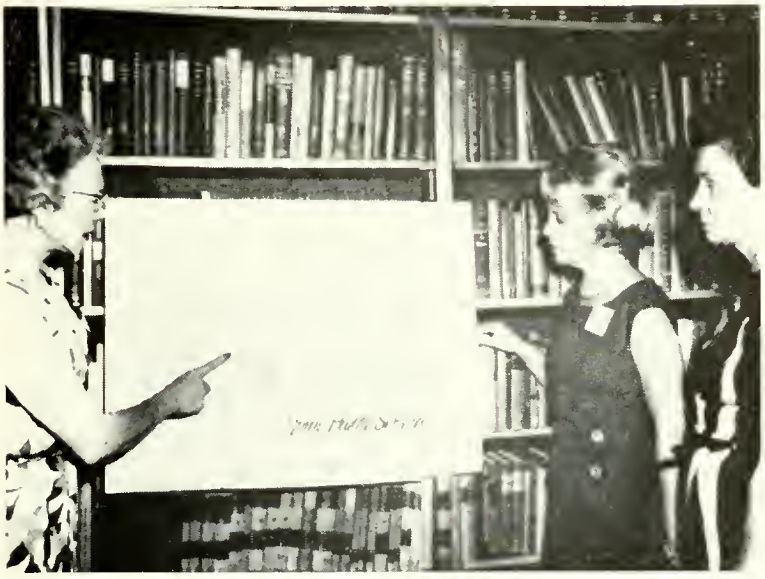
In preparation for the advent of medicare these counties led in meeting certification requirements for participation in medicare. The impetus took legislation; the need required a nursing service, but the foresight and leadership credit goes to Missoula, Ravalli and Richland Counties who pointed the way.

Home Health Care Services for the 65-and-over age group under medicare have been integrated with public health nursing services in other areas of the State also.

The plan includes the establishment of seven districts of multiple adjacent counties. There have been 3 district nursing supervisors employed plus 7 nurses to provide nursing care in the home. The home health care agencies which have been certified and those whose certification is anticipated within the next few weeks are shown on page 43.

In 1965 assistance was given by the Board's staff to the State Department of Public Welfare in developing standards for nursing care in the home to the State's Kerr-Mills recipients.

A Committee Was Formed to Advise the Nursing Division on the Development of Home Health Care.



Consultants from Colorado Who Have Had Successful Experiences in Home Health Care Shared These Experiences with the Advisory Committee and the Staff.

St. Peter's Hospital in Helena Is Under Construction. It Will Provide 82 General Hospital Beds and 10 Mental Health Beds.

During the 19 years of the **Hospital and Medical Facilities Construction Program,** 66 projects in 37 communities in Montana have been constructed. Federal funds, on a 40%-60% matching basis have provided for the construction facilities in areas that would not otherwise have been able to construct them, yet the greatest share of the costs has come directly from the local communities.

A summary of the project construction schedules for hospitals, medical facilities and mental retardation facilities for this report period is as follows:

Project	Location	No. of Beds	Total Est. Cost	Est. Fed. Share	Status
1. HOSPITALS					
Montana Deaconess Hospital	Great Falls	199	$ 4,265,223.00	$1,426,176.00*	Completed
Columbus Hospital	Great Falls	Remodeling Nursing School	1,469,274.07	583,573.64	Completed
Ruby Valley Hospital	Sheridan	9	177,702.60	71,081,04	Completed
Powell County Memorial Hospital	Deer Lodge	35	555,947.00	221,005.60	Completed
St. John's Hospital	Helena	10	401,578.00	160,631.20	Completed
St. Peter's Hospital	Helena	10 Mental 82	3,409,561.00	1,352,162.00	Under Constr.
	SUB-TOTAL - - - -		$10,279,285.67	$3,814,629.48	
St. James Community Hospital	Butte	Nurse's Residence	$ 602,395.33	A.P.W. $ 208,430.00	Completed
Kalispell General Hospital	Kalispell	Nurse's Residence	301,345.51	A.P.W. 155,865.00	Completed
	SUB-TOTAL - - - -		$11,183,026.51	$4,178,924.48	
2. MEDICAL FACILITIES					
Montana Deaconess Hospital	Great Falls	108	$ 800,382.00	$ 320,152.82 (N.H.) 125,013.00 (D&T)	Under Constr.
St. John's Hospital	Helena	25	331,259.00	132,503.60	Completed
Fallon County Nursing Home	Baker	24	367,500.00	147,000.00	Under Constr.
Sweet Grass County Home for Aged	Big Timber	25	286,270.00	92,746.26	Completed
Roundup Memorial Hospital	Roundup	16	217,404.00	86,962.00	Under Constr.
Teton County Nursing Home	Choteau	29	250,000.00	100,000.00	Prep. Dwgs. & Spec.
Lutheran Home of Good Shepherd	Havre	60	881,697.00	306,626.00	Under Constr.
St. Peter's Hospital	Helena	19	412,623.00	163,608.00	Under Constr.
Valley View Home	Glasgow	60	750,000.00	300,000.00	Prep. Dwgs. & Spec.
Dahl Memorial Hospital	Ekalaka	17	233,334.00	93,333.00	Prep. Dwgs. & Spec.
	TOTALS	383	$ 4,530,469.00	$1,867,944.68	
3. MENTAL RETARDATION FACILITIES					
Montana State Training School and Hospital	Boulder	108	$ 500,000.00	$ 100,000.00	Prep. Dwgs. & Spec.

*Includes transfer of $231,685.37 from Wyoming for School of Nursing
APW—Funds from Accelerated Public Works Program

There were 27 payments made on 11 hospital and medical facility projects in the amount of $1,925,293.23 and 5 payments under the accelerated public works program described in the last biennial report in the amount of $210,259. Federal allotments received are included in the financial section of this report on page 49.

The Federal program has been extended through June 30, 1969 and focuses attention on the need for modernization or replacement of public and non-profit hospitals and other health facilities. To this on-going program have been added funds for the construction of facilities for mental retardation and community mental health centers. The money for these new categories is allocated on a 55% - 45% matching basis. The Montana legislature in 1965 amended the Hospital Survey and Construction Act to include the rsepon-sibility for administering these funds to the SBH.

Before any Federal monies are allocated to the State, the Board, with the advice of the Council, must submit a plan for each program. It is revised annually. The Advisory Council conducts a public hearing before making its recommendations to the Board. Applicants for financial assistance from eligible spon-sors must be in accordance with the State Plan. The applications are processed on the basis of priority to areas having the greatest unmet needs for facilities or services and the availability of Federal funds.

Before the 1966 revision of the Hospital and Medical Facilities Construction Plan was developed, an inspection was made of all hospitals and long-term care facilities to make an evaluation of the physical condition of each facility to determine the need for replacement or remodeling under the modernization program. The State summary of the revised Plan indicates that of 64 existing hospitals, 49 are in need of modernization or replacement, while in the long-term care category of 70 needed facilities, 5 are to be added and 22 to be modernized or replaced.

The impending medicare program and modernization as provided by the Hospital and Medical Facilities grants resulted in increased activity with requests for financial assistance exceeding available Federal funds. Due to the facilities in need of modernization or replacement, it is obvious that the goals of the Plan will not be realized for some time to come.

. . . BUILDING FOR THE FUTURE

Public health services to mothers and children are provided chiefly through educational programs, preventive services and referral for care when indicated. Major aims of the programs are to develop understandings and positive attitudes toward health, normal growth and development, health protection and the prevention of health problems.

The Board's most far-reaching activity to accomplish these aims is the "Education for Parenthood Program," carried out in discussion groups for expectant parents and high school students. Its purpose is to better prepare them for their roles in this aspect of family life. During the biennium 1800 expectant parents in 18 communities and 1800 high school students in 18 schools participated in this program.

On the Recommendation of a Group of School Administrators and Teachers in Whose Schools the Program Has Been Functioning, the Program Is Extending Beyond the Classes in Home Economics III Where It Was Started and Its Value Demonstrated. The Program Is Moving Into Other Areas of the School Curriculum and in a Few Schools Is a Part of a Full Semester Course in Family Living. On the Group's Recommendation a Workshop Was Held to Better Prepare School Personnel and Public Health Nurses for Their Roles in the High School Prrogram. The Workshop Was Sponsored by the SBH in Cooperation with the University of Montana in Missoula. It Was Held in June 1966 and Attended by 37 Persons.

The Board Continues to Sponsor an Annual Training Program for Nurse Leaders. At the 1966 Workshop the Group of Expectant Parents (shown at the right) Participated in a Group Discussion Demonstration. There Were 63 Nurses Who Attended the Workshop.

The Montana Medical Association's Committee on Maternal and Child Welfare and staff from the SBH are continuing their **efforts to reduce infant and maternal deaths.**

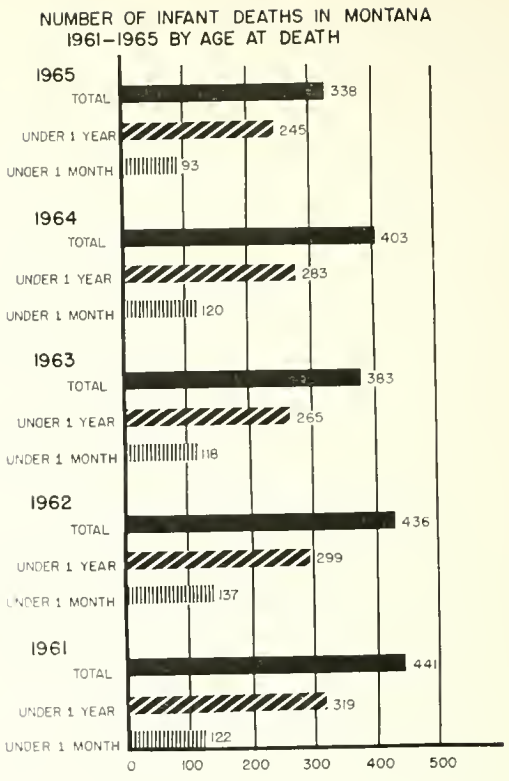
Just completed is their current study on **perinatal deaths** (infants who die before 28 days of age). The number of these deaths occurring during the last five years will be noted on the accompanying graph.

A report of the study for the years 1962, 1963 and 1964 has been made. The information for the study is collected from questionnaires returned by the attending physicians and a tabulation of information on the birth and death certificates. The study indicates improvement in many factors which might contribute to deaths in the newborn period. However, prematurity still ranks high among the causes of these deaths, indicating a need for continued efforts to reduce this toll.

The death rates for infants over 28 days of age and under one year have been steadily dropping in the last 20 years; however, death rates of 24 to 27 per 1,000 live births during the perinatal period persists.

The same committee is concerned about each **maternal death.** Every maternal death is investigated and the causes of death and their possible prevention are discussed.

The intensified public health nursing program in Billings and Great Falls is another attempt to reduce infant and maternal deaths and to promote the well-being of mothers and children, with emphasis on the "high-risk" group. This service is provided through a **special demonstration project** in providing intensified public health nursing services in Billings and Great Falls. The cases carried are from the low-income areas in these cities and are among those considered to be "high-risk."



In Both These Cities a Medical Advisory Committee Has Been Formed. Pictured Above Are the Two Public Health Nurses in Billings, Meeting With the Medical Advisory Committee. The Physician on the Right Acts as a Medical Consultant for Patients Not Under Medical Care.

Child Health Nursing Conferences Are Held to Provide Health Appraisals and Referrals for Suspected Medical Problems. The Children Referred Are Seen by a Physician at Child Health Conferences. A Volunteer (pictured) Is One of Many Providing Assistance to the Public Health Nurses.

Since the demonstration project was initiated, services have been given to 69 prenatal women representing 79 pregnancies. Through July 1966, of the 58 children who survived and were more than 28 days of age, 49 were growing and developing normally.

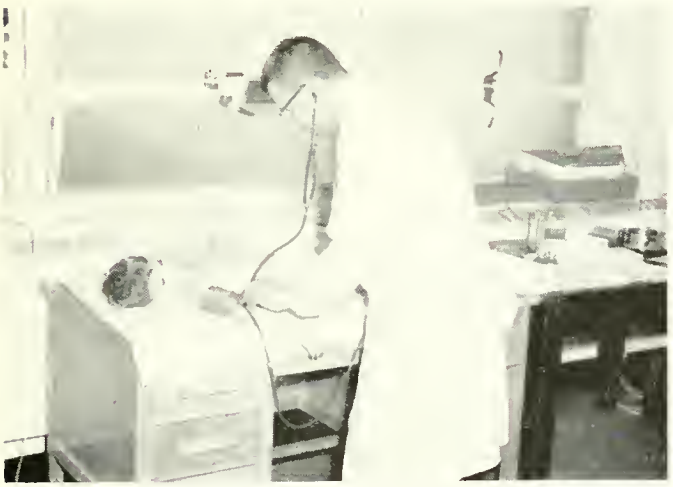
Some of the observable effects of the intensified efforts indicated that more women are seeking prenatal and post-partum care and that they are utilizing the methods of child care as demonstrated by the nurses.

It is expected these two projects will provide orientation for newly employed public health nurses who will be working with families with similar health problems.

The principle of **"Family Planning"** has been adopted by the Board and it urges "that proper information and medical assistance be provided all persons who desire to have a child as well as to people who would like to postpone the event." The endorsement of this principle is based on its definite health implications and encourages individuals to seek medical assistance with family planning only from physicians or from programs conducted with the support of physicians.

The Board's statement further recommends that the "individual's knowledge and understanding of family planning which are derived from his or her experiences as a family member should be augmented by educational experiences which may be provided by physicians, health agencies, churches, schools and community organizations."

The First Health Agency Sponsored Professional Education Program on Family Planning in Montana Was Held in June 1966. Its Purpose Was to Prepare Public Health and Allied Workers to Participate in Family Planning Educational Programs. The Faculty for the Seminar Is Pictured at the Right.



Physicians and Public Health Nurses Have Been Participating in the "Head Start" Programs in Their Communities. One of the Physicians Is Pictured Above as He Gives a Child a Physical Examination.

Public health nursing visits to mothers and children were made in local communities as follows:

3,462 to expectant mothers
3,260 to mothers with newborn babies
8,121 to infants under one year of age.

Guidance in the development and improvement of **school health programs** as well as Education for Parenthood, continues to be given in teachers' meetings and through the distribution of new or revised units for the "Guide for the Montana School Health Program." These include Hearing Conservation, Acute Communicable Disease Control, Venereal Disease, Mental Retardation and Smoking and Health. The Cumulative Health Records were revised and 54,933 copies have been distributed. The Health Information Blank was revised and 27,550 were distributed.

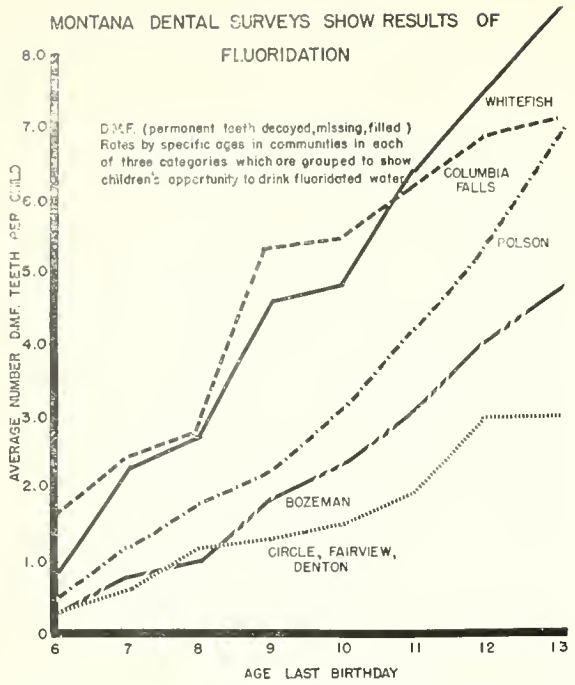
A large percentage of the time of the local public health nurse is devoted to services for the school-aged child. There were 65,140 visits made to children between 5 and 20 years of age.

Assistance is given to Parent-Teacher and Home and School Associations in the Health programs they Promote. One of the SBH staff members will serve as the State PTA health chairman during the next year.

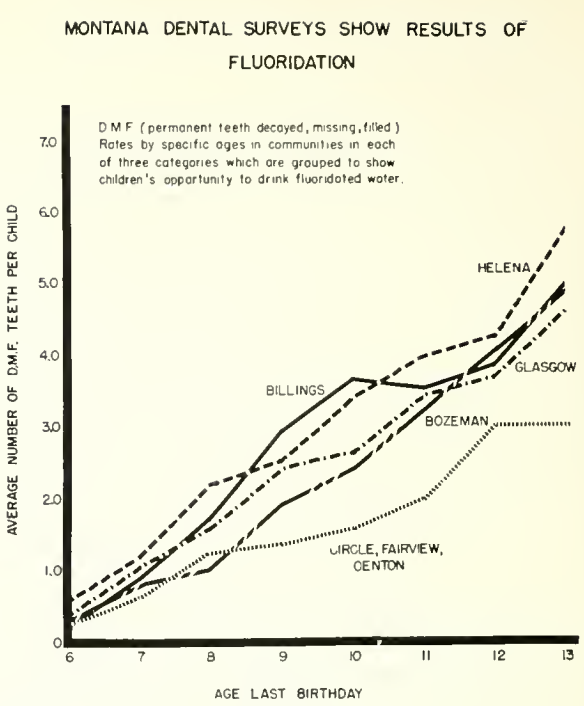
Dental Health Programs are conducted in the schools in an effort to prevent and control dental disease in the school-aged population.

A "Hidden Cavity Detection Program" Was Conducted in Two Schools in Stillwater County. It Was Carried Out With the Assistance of Two Practicing Dentists in Columbus, One of Whom is Pictured to the left. The Teeth of 200 Children Were X-rayed to Discover Cavities Between the Teeth That Cannot Be Seen by Visual Examination. The Purpose of the Program Is to Alert Parents to the Importance of Dental Care for Their Children.

There are five communities with a total population of approximately 34,000 in the State that have water supply systems with controlled fluoride in the amount of 1.2 ppm to partially control dental decay. They are Bozeman, Roundup, Laurel, Conrad and Miles City. Surveys in several of these communities have shown a reduction in tooth decay of almost two-thirds. Also there are 45 communities with a population of over 100,000 and several private water supplies that have an adequate amount of natural fluorides. The benefits of an adequate amount of fluoride (1.2 ppm) in the public water supplies in the prevention of dental decay are illustrated in the accompanying graphs.

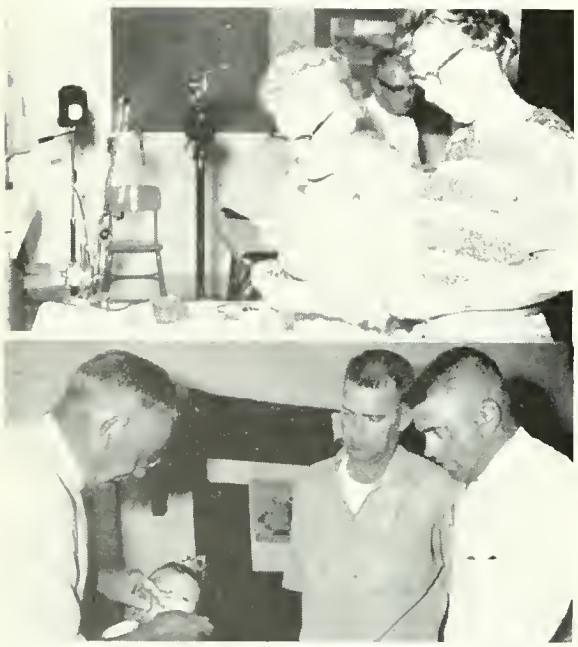


Dental Surveys in Whitefish, Columbia Falls and Polson Where the Public Water Supplies Have Only a Trace of Natural Fluorides Are Compared with Bozeman Where, at the Time of the Survey, There Had Been a Controlled Fluoride Program with 1.2 ppm for 10 Years and a Composite Score for Circle, Denton and Fairview Where the Natural Fluoride Content Varies from 1.2 to 3.6 ppm.



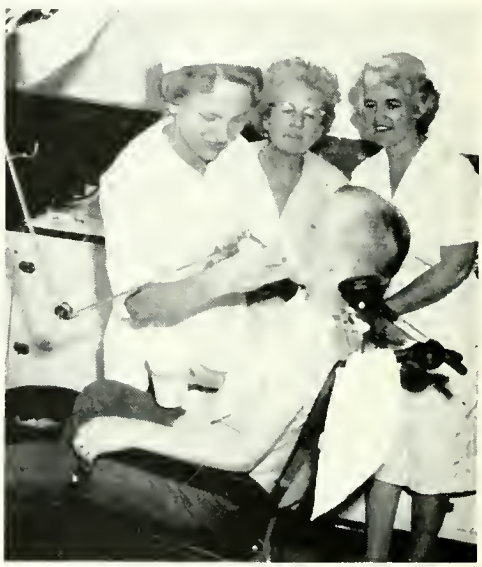
Dental Surveys in Helena Where the Fluoride Content Range Is 0.0 to 0.4 ppm in Three Different Water Supplies; in Billings, Where the Average Fluoride Content Is 0.4 ppm from the Yellowstone River, and in Glasgow Where 0.5 ppm from Three Wells, Are Compared with the Bozeman and Circle-Denton-Fairview Score.

In addition to the controlled fluoridation of public water supplies, the topical fluoride application to the children's teeth also provides for the partial prevention of dental caries. In Ravalli County a five-year annual topical fluoride application program has been conducted whereby approximately 650 children receive this treatment each year. Preliminary results have shown an overall 20% reduction of decay after one treatment and some children have shown as much as a 35% reduction. The Ravalli County program is carried out with the joint efforts of the local dentists, the Health Council and the SBH.



Local Dentists Paint the Teeth with the Fluoride Solution.

Faithful Volunteers Are Pictured as They Fill Cotton Roll Holders Which Are Used to Isolate the Teeth from the Saliva While the Fluoride solution Is Applied.



A Dental Hygienist Is Shown Performing Oral Prophylaxis (Cleaning the Teeth) Which Is Necessary Before the Teeth Can Be Dried and Painted with the Fluoride Solution.

Educational Programs Have Been Conducted in Conjunction with the Dental Health Surveys in the Schools and at Hamilton in Conjunction with the Topical Application Program. Students from One of the Three Missoula High Schools Are Shown Above as They Participated in a Dental Health Education Program.

Dental Health Instruction Is Emphasized for the School-aged Through Workshops and Educational Seminars for Teachers, Student Teachers and Parents.

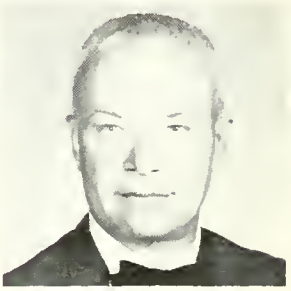
. . . THE METHOD

Members of the Montana State Board of Health and their terms of office are as follows:

R. J. Lasleben, Malta,
President, 1967

Mrs. Richard Ellis,
Great Falls, 1968

Paul H. Bawden, D.D.S.,
Butte, 1969



Edwin C. Segard, M.D.,
Billings, 1970

Richard D. Knapp, M.D.,
Wolf Point, 1971
Vice President

Mrs. O. H. Mann,
Missoula, 1972

George H. Gould, M.D.,
Kalispell, 1973

John S. Anderson, M.D., M.P.H., executive officer, serves as the Board's secretary. S. C. Pratt, M.D., Miles City, served as a member of the Board until April 1966 when he resigned to accept a position on the staff as director of the Division of Medical Facilities Certification. He was the Board's Vice-President from September 1961 until his resignation.

The members of the Board are appointed by the Governor for seven-year terms and they serve as the policy makers, approve regulations and serve in an advisory capacity to the Executive Officer.

For administrative purposes the staff under the direction of the Executive Officer is organized in major divisions. A new division, Medical Facilities Certification, has been created. It encompasses the responsibilities under medicare and the licensing of Hospitals, Medical and related Facilities.

Directors of Major Divisions

John S. Anderson, M.D., M.P.H., Executive Officer and Acting Director, Division of Child Health Services

Mary E. Soules, M.D., M.P.H., Deputy Health Officer and Director Disease Control

Robert A. James, Administrative Officer

John R. Snyder, D.D.S., M.P.H., Director Dental Health

C. W. Brinck, Director Environmental Sanitation

Robert J. Munzenrider, Director Hospital Facilities

S. C. Pratt, M.D., Director Medical Facilities Certification

Edith Kuhns, Director Microbiological Laboratory

Mrs. K. Elizabeth Burrell, Director Public Health Education

Mrs. Virginia Geiger Kenyon, Director Public Health Nursing

John C. Wilson, Director Records and Statistics

The Executive Officer is a **medical administrator** whose responsibility is to provide programs that will prove beneficial to the health of Maryland citizens in so far as staff and funds permit. Some of the objectives are established by the State legislature, others are developed under Board policy.

To carry out these objectives the **executive officer appoints the staff** and works with them to establish methods for reaching these objectives.

Many of the public health programs are carried out with the **advice of advisory councils or committees**, some of which are required by legislative action such as the Advisory Medical and Related Facilities Council and the State Water Pollution Council.

Others are formed at the request of a program director or by the team working in a program. Examples of this type are the Venereal Disease Advisory Committee and the committee to advise the nursing division on its home health care program.

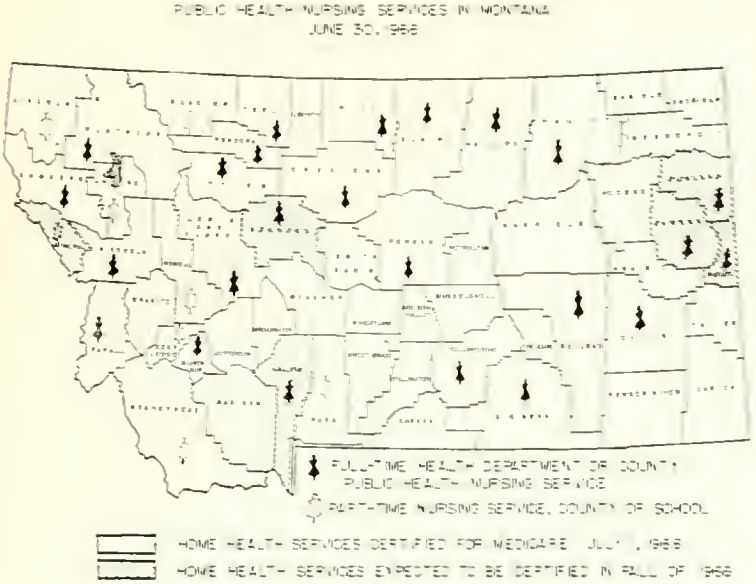
joint committees between State Agencies are helpful as for example the committee between the SBH and the State Department of Public Instruction which provides for coordination of effort in programs relating to the health of the school-aged population.

Some of the joint activities are concerned with in-service training for nurses such as the conference sponsored by the Montana Heart Association and the Board's staff in Heart Disease Control.

The public health committee of the Montana Medical Association is an example of one of the joint efforts between the SBH and professional health associations.

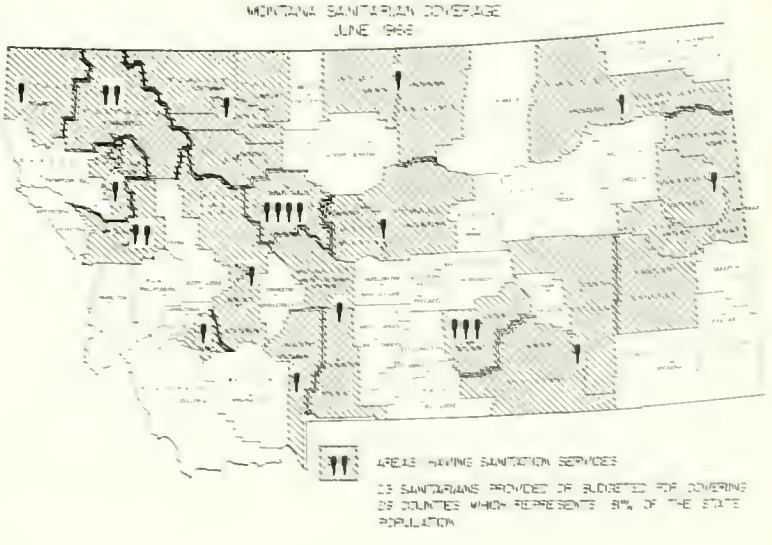
The kinds of services and methods used for providing these services vary and cover a wide range some of the major types are described.

Consultation and Supervision encompass a large part of the work load. Consultation to health officers is provided in the overall development of public health programs and in specific areas such as communicable disease control fiscal matters recruitment and employment of personnel.



The Supervision of Local Public Health Nurses Is a Board Responsibility in Areas Where There Is No Full-time Health Department and Consultation Is Provided to the Public Health Nurses in Health Departments.

Consultation is provided in the improvement of patient care in nursing homes in the improvement of medical and long-term facilities and chronic disease programs.



Consultation Is Given to Local Sanitarians.

Licensing and certification responsibilities include those for restaurants meat markets tourist camp grounds refuse disposal hospitals long-term facilities home health care agencies and independent laboratories. Local laboratories must also be certified for the bacterial analysis of water and serologic tests for syphilis and for tests for PKU—phenylketonuria.

Informal Conferences on Mutual Problems Are Often Held, Similar to the One Pictured at right Between Representatives from Selective Service, the SBH and the Division of Vocational Rehabilitation. The Objective of This Conference Was to Work Out Ways to Provide Assistance to the Medical and Psychiatric Rejectees at the Armed Forces Examining Station for Military Service in Butte.

Payment is made for Medical Care and Hospitalization under the Crippled Children's Program when the family is not able to pay all or part of the cost. **Penicillin is provided for rheumatic heart disease prevention,** and **vaccine is provided** for DTP, polio and measles for preschool children.

Surveys are made of hospitals and long-term care facilities to determine the need for new construction or remodeling and to determine certification under medicare; to determine the need for the development of home health care agencies; of personnel needs, salaries and typical job duties.

In selected areas sanitation surveys are made to determine the status of sanitation in relationship to disease incidence and other factors of importance in public health. Heart Sound screening surveys are made in some areas of the State—particularly rural areas and a State-wide survey relating to mental retardation was made. Surveys are also made to determine outbreaks of communicable disease by sampling the population for laboratory studies.

Many **direct services** are provided, among them being the opportunities for health education services in most of the Board's programs in local communities. These may be workshops, seminars, conferences, small and large group meetings.

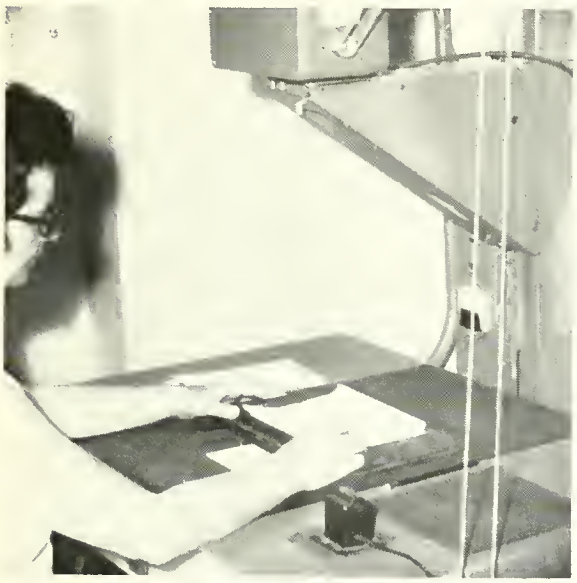
The Board Maintains a Library of 5,337 Volumes; 338 of Them Were Purchased During the Biennium and Are Available on Loan.

There Were 39,652 Pieces of Health Literature Distributed and 7 New Exhibits Constructed.

The Board's film library contains 250 films, 47 of which were purchased during the biennium. The number of films loaned was 1,476 and seen by 42,752 persons.

Certified copies of individual records are made, delayed birth certificates are filed, vital records corrected, adoptions and legitimations are processed. Verification of information on records is provided to official governmental agencies and birth notifications in the form of miniature certificates are sent to the mothers of newborn infants.

Making Copies of Vital Records Has Been Simplified by the Utilization of Microfilm, Automatic Recall and Copy Making Equipment.



A Special Camera Is Used in Recording Vital Records on Film.

The Preparation of Lists and Statistical Tabulation Has Been Up-dated by the Utilization of the Automated Data Processing Center in the State Department of Administration.

Birth, death and fatal death certificates, marriage and divorce records, burial-transit permits and other printed materials necessary to operate the vital registration system are made available.

Other direct services include the supervision of water and sewage facilities, approval of plans for swimming pools, schools subdivision plans for adequate water and sewage facilities, and solid waste disposal areas.

The assignment of public health staff to work on special projects in local areas and nutrition services to families with diabetics and children with PKU (phenylketonuria) on physician request are also direct services.

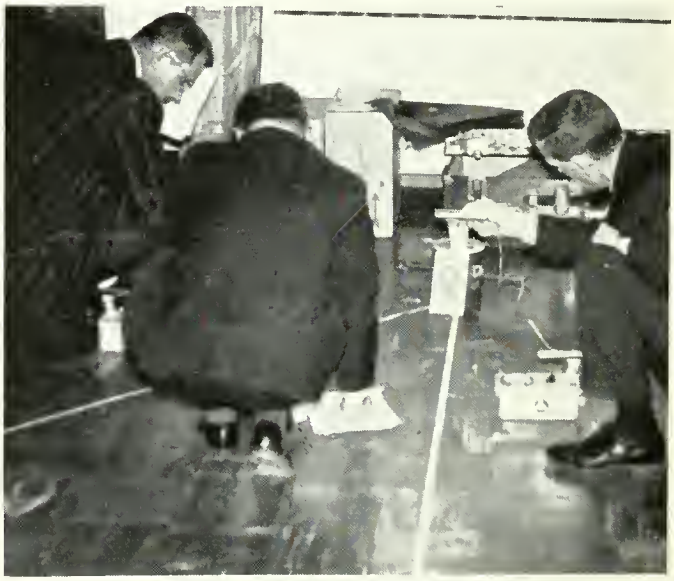
Hearing screening and complete audiological testing services, diagnostic cardiac services for rheumatic and congenital heart disease and handicapped children, epidemiological services in venereal disease control and the control of other communicable diseases are made available.

More Than 75,000 Examinations for the Detection and Control of Acute Communicable Diseases Due to Bacterial and Viral Disease Agents Are Made Each Year. Bacterial Tests for Water and Food Products in Suspected Causes of Illness Are Run.

In-Service Training Programs are conducted to help keep public health workers — State and local and related personnel—up-to-date on the rapidly increasing new scientific developments, new procedures and programs. Current laboratory procedures in general medical bacteriology were taught in May 1965 to technicians from 17 clinical laboratories in the State. It was held at the Montana State University in Bozeman and conducted in cooperation with the Laboratory Branch of the Communicable Disease Center in Atlanta, Georgia.

Seminars on Mental Health, Mental Retardation and Family Planning Were Held. These Were Sponsored by the Western Branch of the American Public Health Association in Cooperation with the University of California—Berkeley and Los Angeles, the SBH and the Montana Public Health Association.

Each Year Two Training Sessions Are Held for Sanitarians. Pictured on the right is a Group of Sanitarians Carrying Out an Exercise in a Civil Defense Training Course.



Trends in Nursing Education Are Reflected by Changes in the Curriculum of the School of Nursing at Montana State University in Bozeman. As a Result the SBH Was Involved with the Placement of 45 Student Nurses for Field Practice in Public Health with local Public Health Nurses. Pictured at right Is a local Nurse Demonstrating the Audiometer Used in the Hearing Screening Procedure to Two Student Nurses.

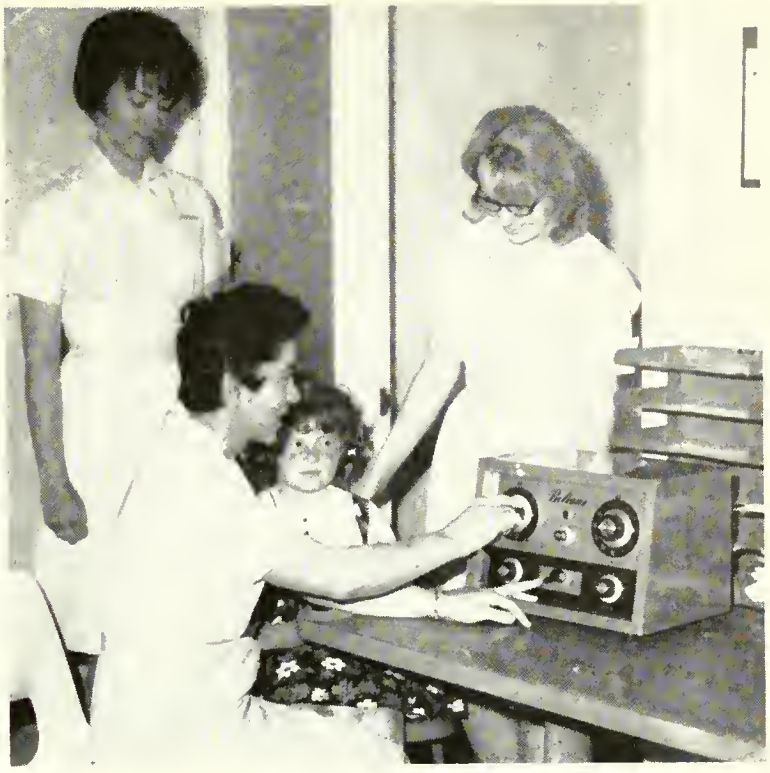


Photo courtesy "Chinook Opinion," Chinook

In addition, the Health Departments in Great Falls and Missoula continue to provide student experience on a regular basis. Nurses graduating from M.S.U. are quailfied for beginning positions in public health nursing.

Field training for health educators from the Schools of Public Health is provided. During the biennium, three students were assigned from the University of California at Berkeley and one from the University of Minnesota.

The SBH Staff Participates in Refresher Courses for Professional Health Workers. Pictured at left Is an Instruction Session on "Interceptive Orthodontics" Whereby Certain Procedures Can Be Used to Prevent Malocclusion from Occurring in Children. This Session Was Sponsored by the American Society of Dentistry and Held at Chico Hot Springs.

Problems in financing, recruitment, and lack of office space continue to plague the department.

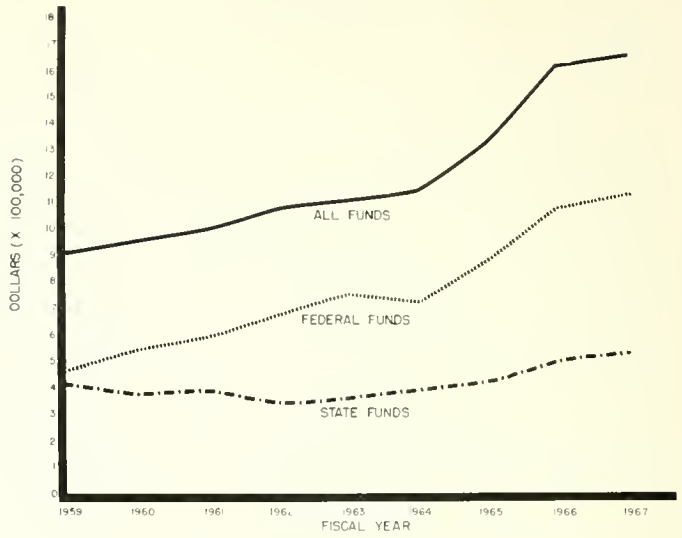
The increase in Federal legislation regarding health services during recent years has had a dramatic effect on the SBH budget. In fiscal year 1966 it was 43% higher than in 1964. Although State funds increased considerably in the last year of the biennium, the primary cause of the budget increase was the addition of special projects financed wholly from special Federal funds and affected many health programs.

Despite the Increase in State Funds the Percentage of Such Funds in the Total Budget Was Lower than the Percentage in Previous Bienniums. In 1965 and 1966 the Budgets Were 30% State Funds and 69% Federal Funds. This Compares to 43% State and 57% Federal Funds in 1960.

A considerable portion of the increased budget funds were required to defray increased costs of operations rather than to cover an expansion of services. Medical surgical fees and hospitalization costs were considerably higher (described on page 19). Salaries, supplies and the cost of services increased.

State funds were inadequate to match all of the Federal grants in heart, cancer, radiological health, crippled children's services and dental health. For the first time, Federal funds for general hospital construction could not all be allocated. After the allocation of approved projects there was not enough money remaining to start any new projects. Therefore, there was $32,512.77 transferred to the State of Wyoming.

SBH BUDGETED FUNDS
1959-1967



There was $47,570.75 in the rehabilitation facilities category transferred to Colorado since the funds in this category are not transferable to another category and there were not applicants for it in the State. Funds for Mental Health Centers in the amount of $133,880 were transferred to the State of Arizona since the required State Plan had not been prepared due to unavoidable circumstances, nor were there any applicants for its use. Construction financial tables will be found on pages 36 and 49.

Competition for public health trained personnel has become more critical as there are increasing numbers of programs requiring new personnel and there is a constant search on the part of agencies to fill vacant positions. Recruitment must be conducted on a national basis as Montana has few training facilities and a small reservoir of adequately-trained personnel in the State. Shortage of personnel because of the high demand has tended to increase salary levels. State agencies generally are in a poor bargaining position, as their compensation plans are usually too low for competition with the Federal government and private industry. With the increased number of programs, incumbent staff have necessarily had to assume additional burdens for their initiation and conduct.

Critical shortages exist for physician directors, health educators, nurses, microbiologists and qualified personnel for hospital licensing, certification and construction programs.

The Board lost several long-time employees either during the biennium or during the early part of the next biennium, before this publication went to press. They are listed below with the number of years they gave service to health programs in Montana:

Miss Frances Davidson, Public Health Nursing Consultant, 14 years, retired.
Betty Gilson, M.D., director, Heart Diagnostic Center, 16 years, resigned.
Miss Lilly Mattson, staff member in division of records and statistics, 30 years, retired.
Miss Daisy Prentice, Hospital Nursing Consultant, 19 years, retired.

Local public health nurses who gave many years of service are **Mrs. Katherine Holderman,** Great Falls; **Miss Malinda Wolkow,** Conrad; **Mrs. Rose Lentfer,** Livingston.

Local deputy registrars who retired after many years of service are: **Miss Louisa Miller,** Great Falls; **Miss Helen Shull,** Missoula, and **Miss Nell Sullivan,** Helena.

Their contributions are greatly appreciated and their services will be missed.

Since the shortage of **office space** has become critical, it has become necessary to rent space away from the Capitol Complex for office quarters for two divisions. Space alloted in State-owned buildings is not sufficient to house all personnel and provide adequate space for workrooms, filing and storage areas. Personnel have insufficient space for efficient performance of their duties, which has a hampering effect on the conduct of health programs.

SBH BUDGETED FULL-TIME POSITIONS
1959-1967

FINANCIAL TABLES

BUDGETS AND EXPENDITURES

State and Federal Funds

FISCAL YEARS 1960 TO 1967

Year		Total	Federal*	State**
1967	Budgeted (Preliminary)	$1,659,795	$1,141,835	$ 517,960
1966	Budgeted	1,634,148	1,130,448	503,700
	Expended	1,470,776	970,409	500,367
1965	Budgeted	1,339,097	908,647	430,450
	Expended	1,239,247	809,881	429,366
1964	Budgeted	1,139,277	727,599	411,678
	Expended	1,089,645	695,180	394,465
1963	Budgeted	1,123,527	747,140	376,387
	Expended	1,023,597	660,913	362,684
1962	Budgeted	1,087,985	706,685	381,300
	Expended	989,568	629,379	360,189
1961	Budgeted	1,029,854	610,180	419,674
	Expended	969,122	574,970	394,152
1960	Budgeted	972,101	553,374	418,727
	Expended	919,220	534,962	384,258

*Excludes Federal construction grants for hospital, medical and sanitary facilities.

**Contributions are included in State funds.

FEDERAL ALLOTMENTS FOR HOSPITALS, MEDICAL AND RELATED FACILITIES

	1965	1966	Total
Hospitals & Public Health Centers:			
Construction	$ 638,930	$ 581,300	$1,220,230
Modernization		200,000	200,000
Long-Term Care	200,000	288,294	488,294
Diagnostic or Treatment Centers	100,000	100,000	200,000
Rehabilitation Facilities	50,000	50,000	100,000
Sub-Total	$ 988,930	$1,219,594	$2,208,524
Mental Retardation Facilities	$ 100,000	$ 100,000	$ 200,000
Mental Health Centers	133,880	187,826	321,706
TOTAL	$1,222,810	$1,507,420	$2,730,230

SUMMARY OF EXPENDITURES AND ENCUMBRANCES BY OBJECT

Object	July 1, 1964-June 30, 1965	July 1, 1965-June 30, 1966	Total
Salaries	$ 768,836.13	$ 859,360.83	$1,628,196.96
Employee Benefits	49,270.58	55,904.66	105,175.24
Travel	90,785.13	107,505.14	198,290.27
Office Expense	108,178.88	167,258.08	275,436.96
Scientific Supplies	16,043.84	24,250.27	40,294.11
Merit System	9,698.36	11,130.45	20,828.81
Drs. Fees, Clinics and X-Ray	77,423.20	101,465.40	178,888.60
Hospitalization	73,698.27	86,942.83	160,641.10
Appliances	13,562.01	15,250.92	28,812.93
Miscellaneous	12,901.80	23,190.74	36,092.54
Aid to Local Areas	18,848.46	18,516.55	37,365.01
TOTALS	$1,239,246.66*	$1,470,775.87*	$2,710,022.53

*Encumbrances 1965 $30,183.16
1966 61,624.51

SUMMARY OF EXPENDITURES AND ENCUMBRANCES BY SOURCES

	JULY 1, 1964 TO JUNE 30, 1965			JULY 1, 1965 TO JUNE 30, 1966		
	State	Federal	Total	State	Federal	Total
ADMINISTRATION	($ 31,721.02)	($ 64,543.63)	($ 96,264.65)	($ 51,255.86)	($ 57,320.00)	($ 108,575.86)
General	29,343.24	52,409.35	81,752.59	48,720.47	39,758.60	88,479.07
Merit System	.....	9,698.36	9,698.36	.....	11,130.45	11,130.45
Emergency Health Planning	2,377.78	2,435.92	4,813.70	2,535.39	6,430.95	8,966.34
CHILD HEALTH SERVICES	(83,419.58)	(261,266.69)	(344,686.27)	(75,546.32)	(344,594.85)	(420,141.17)
Maternal and Child Health	5,164.27	58,397.90	63,562.17	5.00	85,524.65	85,529.65
Crippled Children	19,683.54	25,190.57	44,874.11	16,286.12	33,157.65	49,443.77
Surgical, Doctors Fees and Clinics	14,098.69	30,740.70	44,839.39	13,799.02	53,994.00	67,793.02
Hospitalization	19,602.06	45,670.11	65,272.17	17,074.91	59,386.00	76,460.91
Appliances	2,032.94	11,529.07	13,562.01	3,638.67	11,612.25	15,250.92
Cerebral Palsy Center	22,838.08	36,748.34	59,586.42	24,341.45	41,920.30	66,261.75
Cleft Palate Program	.....	52,990.00	52,990.00	401.15	59,000.00	59,401.15
DENTAL HEALTH	(2,110.98)	(31,461.75)	(33,572.73)	(2,612.66)	(38,347.25)	(40,959.91)
General	2,110.98	20,283.41	22,394.39	2,612.66	20,929.70	23,542.36
Oral Cancer Demanstration Project	.....	4,215.24	4,215.24	.....	4,069.55	4,069.55
Dental Health—Grant	.....	6,963.10	6,963.10	.....	13,348.00	13,348.00
DISEASE CONTROL	(66,911.62)	(235,073.18)	(301,984.80)	(59,757.57)	(277,942.20)	(337,699.77)
General	62,188.25	40,849.28	103,037.53	49,277.29	52,670.41	101,947.70
Hearing Conservation	.....	4,882.01	4,882.01	.....	20,439.69	20,439.69
Immunization Program	.....	53,362.88	53,362.88	.....	50,301.58	50,301.58
Emergency Medical Services	.....	.....	.....	.....	5,472.69	5,472.69
Drugs and Biologics	.....	556.24	556.24	.....	(394.32) *	(394.32) *
Air Pollution Special	.....	.....	.....	.....	11,539.89	11,539.89
Radiological Health	.....	10,496.44	10,496.44	.....	2,217.02	2,217.02
Cardiac Diagnostic Center	4,426.26	32,863.70	37,289.96	10,180.28	27,150.00	37,330.28
Medical Rejectee Program	.....	.....	.....	.....	11,329.67	11,329.67
Venereal Disease Control	297.11	17,229.23	17,526.34	300.00	11,336.17	11,636.17
Mental Retardation	.....	17,646.90	17,646.90	.....	21,909.40	21,909.40
Chronic Illness	.....	57,186.50	57,186.50	.....	63,970.00	63,970.00
ENVIRONMENTAL SANITATION	(91,913.12)	(48,733.31)	(140,646.43)	(103,306.91)	(46,211.38)	(149,518.29)
General	61,299.94	22,436.72	83,736.66	67,531.14	21,238.59	88,769.73
Water Pollution	30,529.69	26,296.59	56,826.28	35,652.04	24,972.79	60,624.83
Sanitarians Reg. Council	83.49	.....	83.49	123.73	.....	123.73
HEALTH EDUCATION	(8,229.58)	(26,324.10)	(34,553.68)	(19,703.53)	(18,741.16)	(38,444.69)
MEDICAL FACILITIES	(29,614.61)	(2,429.25)	(32,043.86)	(33,299.57)	(34,179.53)	(67,479.10)
Hospital Facilities	29,614.61	2,429.25	32,043.86	30,781.92	3,988.25	34,770.17
Hospital and L.T.C. Licensing	.....	.....	.....	2,517.65	.....	2,517.65
Medical Facilities Certificotion	.....	.....	.....	.....	30,191.28	30,191.28
LABORATORIES DIVISION	(56,944.69)	(42,654.57)	(99,599.26)	(75,495.42)	(29,549.61)	(105,045.03)
LOCAL HEALTH SERVICES	.....	(81,146.75)	(81,146.75)	.....	(63,055.32)	(63,055.32)
Mental Health	.....	54,946.89	54,946.89	.....	33,381.77	33,381.77
T.B. Special	.....	7,351.40	7,351.40	.....	11,157.00	11,157.00
Aid to Counties	.....	18,848.46	18,848.46	.....	18,516.55	18,516.55
PUBLIC HEALTH NURSING	(6,068.82)	(16,247.16)	(22,315.98)	(12,913.57)	(56,076.13)	(68,989.70)
General	6,068.82	16,247.16	22,315.98	12,913.57	17,545.91	30,459.48
Home Health Services	.....	.....	.....	.....	38,530.22	38,530.22
RECORDS AND STATISTICS	(52,432.25)	.....	(52,432.25)	(66,475.48)	(4,391.55)	(70,867.03)
TOTALS	($ 429,366.27)	($ 809,880.39)	($1,239,246.66)	($ 500,366.89)	($ 970,408.98)	($1,470,775.87)

*Refunds exceeded expenditures.

TOTAL EXPENDITURES AND ENCUMBRANCES—FISCAL YEARS 1961-1966

	1961	1962	1963	1964	1965	1966
ADMINISTRATION	($ 80,944.08)	($ 82,969.58)	($ 79,475.44)	($ 91,975.91)	($ 96,264.65)	($ 108,575.86)
General	70,009.83	74,842.15	71,011.36	78,780.33	81,752.59	88,479.07
Merit System	8,709.95	8,127.43	8,464.08	9,266.79	9,698.36	11,130.45
Training	2,224.30	.....	.....	.....	.....	.....
Emergency Health Planning	.....	.....	.....	3,928.79	4,813.70	8,966.34
CHILD HEALTH SERVICES	(286,018.15)	(267,571.01)	(269,963.04)	(319,337.49)	(344,686.27)	(420,141.17)
Maternal and Child Health	55,674.25	33,482.59	51,595.32	61,466.54	63,562.17	85,529.65
Crippled Children	30,945.27	39,692.39	46,984.08	56,601.64	44,874.11	49,443.77
Surgical and Doctors Fees	47,459.18	39,606.89	33,474.35	39,629.70	44,839.39	67,793.02
Hospitalization	56,459.94	56,926.67	34,790.05	50,421.61	65,272.17	76,460.91
Appliances	8,848.07	8,750.36	7,211.50	9,625.38	13,562.01	15,250.92
Cerebral Palsy Center	41,631.44	43,112.11	45,907.74	51,543.00	59,586.42	66,261.75
Cleft Palate Program	45,000.00	46,000.00	50,000.00	50,049.62	52,990.00	59,401.15
DENTAL HEALTH	(27,288.97)	(18,706.75)	(29,829.04)	(23,077.57)	(33,572.73)	(40,959.91)
General	27,288.97	18,706.75	29,829.04	23,077.57	22,394.39	23,542.36
Oral Cancer Demonstration	.....	.....	.....	.....	4,215.24	4,069.55
Dental Health—Grant	.....	.....	.....	.....	6,963.10	13,348.00
DISEASE CONTROL	(131,892.95)	(156,493.29)	(206,473.22)	(226,406.72)	(301,984.80)	(337,699.77)
General	96,993.95	95,132.05	90,504.32	100,176.65	103,037.53	101,947.70
Cancer Special	.....	11,292.80	20,561.22	.....	.....	.....
Hearing Conservation Program	.....	.....	.....	147.36	4,882.01	20,439.69
Community Vaccination Program	.....	.....	.....	235.83	53,362.88	50,301.58
Emergency Medical Services	.....	.....	.....	.....	.....	5,472.69
Drugs and Biologicals	1,520.78	—320.22*	643.88*	21.44	556.24	—394.32*
Air Pollution Special	.....	.....	.....	.....	.....	11,539.89
Radiological Health	.....	.....	1,103.33	11,064.93	10,496.44	2,217.02
Cardiac Diagnostic Center	21,677.27	25,572.54	38,125.16	37,365.07	37,289.96	37,330.28
Medical Rejectee Program	.....	.....	.....	.....	.....	11,329.67
Venereal Disease Control	7,678.27	6,070.32	13,349.05	14,405.57	17,526.34	11,636.17
Heart Sounds Screening	.....	.....	.....	7,135.37	.....	.....
Mental Retardation	.....	.....	.....	.....	17,646.90	21,909.40
Chronic Illness	.....	9,832.32	43,474.02	55,854.50	57,186.50	63,970.00
Improvement Patient Care in Nursing Homes	4,022.68	8,913.48	.....	.....	.....	.....
ENVIRONMENTAL SANITATION	(106,313.95)	(117,762.75)	(116,442.28)	(131,149.33)	(140,646.43)	(149,518.29)
General	65,387.17	67,394.24	63,309.66	72,252.37	83,736.66	88,769.73
Water Pollution	40,771.80	50,270.77	52,995.16	58,736.31	56,826.28	60,624.83
Sanitarians Reg. Council	154.98	97.74	137.46	160.65	83.49	123.73
HEALTH EDUCATION	(43,232.01)	(41,313.79)	(36,165.78)	(30,651.87)	(34,553.68)	(38,444.69)
General	36,173.83	38,173.04	36,165.78	30,651.87	34,553.68	38,444.69
Narcotics Education	7,058.18	3,140.75	.....	.....	.....	.....
MEDICAL FACILITIES	.....	.....	.....	.....	.....	(67,479.10)
Hospital Facilities	(33,528.15)	(34,014.45)	(34,181.09)	(33,138.97)	(32,043.86)	34,770.17
Hospital and L.T.C. Licensing	.....	.....	.....	.....	.....	2,517.65
Medical Facilities Certification	.....	.....	.....	.....	.....	30,191.28
LABORATORIES DIVISION	(91,306.12)	(92,581.51)	(98,957.03)	(92,220.17)	(99,599.26)	(105,045.03)
Microbiology	67,601.65	73,814.64	76,742.17	86,446.40	99,599.26	105,045.03
Virology	23,704.47	18,766.87	22,214.86	5,773.77	.....	.....
LOCAL HEALTH SERVICES	(107,016.32)	(116,585.52)	(86,586.35)	(76,375.48)	(81,146.75)	(63,055.32)
Mental Health	45,876.76	46,645.27	40,924.83	54,240.15	54,946.89	33,381.77
T.B. Special	.....	.....	.....	.....	7,351.40	11,157.00
Aid to Local Areas	61,139.56	69,940.25	45,661.52	22,135.33	18,848.46	18,516.55
DIVISION OF NURSING	(19,510.33)	(18,738.47)	(20,522.20)	(19,193.28)	(22,315.98)	(68,989.70)
General	19,510.33	18,738.47	20,522.20	19,193.28	22,315.98	30,459.48
Home Health Services	.....	.....	.....	.....	.....	38,530.22
RECORDS AND STATISTICS	(42,070.91)	(42,830.72)	(45,001.54)	(46,118.00)	(52,432.25)	(70,867.03)
TOTALS	$ 969,121.94	$ 989,567.84	$1,023,597.01	$1,089,644.79	$1,239,246.66	$1,470,775.87
Federal	574,970.31	629,379.21	660,913.43	695,179.57	809,880.39	970,408.98
State	394,151.63	360,188.63	362,108.40	393,718.62	422,666.27	493,296.22
Other	.....	.....	575.18	746.60	6,700.00	7,070.67

*Refunds exceeded expenditures.

INDEX

INDEX